TRAIL, de Landscape

A PUBLICATION CONCERNED WITH NATURAL HISTORY AND CONSERVATION



Trail & Landscape Vol. 19, No. 2/57-120/March, April 1985

<u>andscape</u>

Editor & Production Coordinator - Production Staff

Logica Redd at

Associate Editors

Bill mine leter Hall

Business Manager

& Exping Coordinator

Graphics

The Ottawa Field - Naturalists' Club

President

E. Franklin Pope

Objective of the Club

Cicly Publications (1) At A Control of the ALE Cont

Field Trips, Lectures (1997) all and the control of access fill to the control of the control of

Membership Fees (1991) and adjusted to the control of the selection of the

Membership application correspondence OF STAWARRED MATERIAL TO CLUB 615 722 1053

the contract of the contract of Office Octave Parasi Information

TRAIL) of Landscape.

Published by The Ottawa Field - Naturalists' Club Box 3264, Postal Station C Ottawa K1Y 4J5

Editorial Address:

Joyce M. Reddoch, Editor 548 Rivershore Crescent Gloucester, Ontario K1J 7Y7

Welcome, New Members	58
Council Report / Bill Gummer	59
Federation of Ontario Naturalists Report Stew Hamill	61
Ottawa Regional Science Fair / Ken Taylor	63
Trail & Landscape Circulation	63
Recent Bird Sightings / V. Bernard Ladouceur -	64
A Sight Record of Northern Fulmar in Ontario - B.M. Di Labio, R.R. Brouillet, D.J. MacKinno	67 on
Fourth Annual Christmas Bird Count Roundup Astrid and Bruce Di Labio	68
The Robins of Castle Hill Crescent Ross Anderson	72
Winter Kill of Fish in Mud Lake / Jack Halliday-	75
Out Damned Spot! / Brian Coad	76
Philopatry and Innis Point Returns Joanne Dean	78
Just April / Linda Jeays	81
The Ontario Breeding Bird Atlas: Ontario Region-Christine Hanrahan	82
Apparent Predation on a Bat by an American Crow-Bruce M. Di Labio and Peter M. Dunn	86
Life Cycles: The World of the Little Brown Bat - Isabelle Nicol	87
Recent Significant Plant Records from the Ottawa District Part II Daniel F. Brunton	96
Early Winter Birding Field Trip Bruce M. Di Labio	113
Coming Events	117

Welcome, New Members

Ottawa Area

Freda R. Barriault Mr. & Mrs. R.D. Barry May C. Berry Chris Boulton & family Rosalind E. Bradford & family Stephen G. Bridgett Wendy J. Brown & family Claudia Burns E.W. Burridge Alan B. Cameron Mr. & Mrs. Campbell Judy L. Camus Marie T. Carriere Ian & Anne Carruthers Yollande Chartrand Murray Citron Laurie Consaul Ron & Sandra Corbeil Miss Mireille Delisle A. Rex Dixon & family Beatrice Dunning Andre & Judith Du Plessis R.D.R. Emmerson A.W. Fyfe Mark Gawn Wayne Girard Heather Glass & family Mrs. Doreen Gustafson Dr. & Mrs. L.M. Hampson M. Joy Hearn Laurie Henderson Gillian K.M. Kearvell Richard D. Killeen Bernd Krueger Mrs. Pamela Krystynak Lucille Lahaie

Dorothy Laurin & family Edward & Dorothy Lawson Robert Lussier & family Susan M. MacKinnon Larry & Jean Martin Pauline McColl Carl W. McCoomb Evelvn McCorkell Gerald McKeating Eleanor McSheffrey & family David & Elvse Monroe Giles & Louise Morrell Mrs. J.T. Murchison & family David J. Neave & family A.E. Nolan & family Andrew E. Oakes Daniel Perrier Marie-Paule Perrier Yves Y.P. Prevost Stan & Gulten Rosenbaum Andre J.M. Seguin Kathleen M. Simmons Gary J. Slimon & family M. Carol Southern Peter & Ruth St. Onge Major William G. Sutherland The Sutherland family Gretlu Tolgyesy & family Daniel Toussaint Arthur & Shirley Trott Beth Tullis & family Suzanne Warwick Arnold & Mollie Wilson Florence E. Woolner Glenn Wright Liza Zaslavsky

Other Areas

Mr. Gerry Aiudi
Edmonton, Alberta
Robert Alvo
Peterborough, Ontario
Ken Chipeniuk
St. Paul, Alberta

Andrew E. Deroche
North Vancouver, B.C.
Brian J. Hearn
Charlottetown, P.E.I.
Denver W. Holt
Waltham, Massachusetts

Elizabeth Inhaber
Regina, Saskatchewan
Jorma Jyrkkanen
Terrace, B.C.

December, 1984

Dr. D. Michener Guelph, Ontario Randall Wilk King Salmon, Alaska

Barbara Campbell Chairman, Membership Committee



The Annual General Meeting

The 106th Annual General Meeting was held on January 8th at the National Museum of Natural Sciences, with about 45 members present.

The proposal to change the Club name was defeated, and the existing, long-established name, will continue. However, it was agreed, on a new motion from the floor, that the Council introduce for everyday use a "style name", a more stream-lined "Ottawa Field Naturalists", avoiding "The", "-", """ and "Club".

The Council's overall report was read and accepted. We are becoming used to hearing a long list of names identifying places and problems in which Club officers and councillors have been playing a role. The roles vary in significance; they may involve only the offering of advice, or they may involve heavy participation by several Club members and may be carried out in the public eye at several levels of municipal, provincial and federal government. Some of the names on the list are well-known to us all, but others are not.

The Conservation Committee's report refers to Alfred Bog, Carp Hills, Marlborough Forest, all three areas of major concern to us; Ontario Hydro transmission lines, and wetland management in Ontario; further away, parks in Ontario, Manitoba and British Columbia; and practically in the centre of our own area, the questions of what might happen to Mud Lake and Britannia Woods.

The Birds Committee set up a subcommittee for the work required on the Ontario Breeding Bird Atlas, and this reorganization enabled a great increase in coverage in the Ottawa Region

last year. This year will be the final year for this broad undertaking.

The Education and Publicity Committee provided speakers on various subjects for a number of organizations, including, for instance, two Wolf Cub Packs and Senior Citizens groups. An educational package on birds, based on a set of slides and designed for use in schools and elsewhere, has been prepared through the efforts of George McGee.

The output of the Excursions and Lectures Committee is always impressive: the continued procession of good monthly meetings, the excursions (48 in the period!), a number of special subject tours, and the annual Soirée. The Club as a whole must be grateful to all those people who have participated in this program. Honorable mention is also due Jean Hastie and her helpers, who have provided coffee and cookies for us after meetings, and meeting after meeting.

The Membership Committee reports that Club membership dropped slightly in 1984. Total paid memberships at the end of September were 1233 (1278 in 1983); of these, 1154 are in Canada (1185 last year) and 803 (816) are local. Our Honorary Members total 19, with four new ones having been named at the Soirée.

The Publications Committee reports that *The Canadian Field-Naturalist* under Editor Francis Cook has made a good recovery with six issues out in 1984. *Trail & Landscape*, Volume 18, was the largest yet - 288 pages. The purchase of a printer for Editor Joyce Reddoch, using the Elizabeth Slasor bequest, has increased the efficiency of preparation of camera-ready copy. John Sankey is the new editor of *The Shrike*.

Club Officers and Council Members

The following slate of officers and Council members was presented by the Nominating Committee and approved by the members:

 President
 Frank Pope (829-1281)

 Vice-Presidents
 Bill Arthurs (225-6941)

 Bill Gummer (596-1148)

 Recording Secretary
 Barbara Martin (741-7290)

 Corresponding Secretary
 Art Martell (521-5576)

 Treasurer
 Paul Ward (722-1203)

Other Council members: Ron Bedford, Dan Brunton, Barbara Campbell, Bill Cody, Francis Cook, Ellaine Dickson, Don Fillman,

Arlin Hackman, Jeff Harrison, Bernie Ladouceur, Lynda Maltby,
Philip Martin, Betty Marwood, Patricia Narraway, Ken Taylor and
Roger Taylor.

The names of new councillors are underlined. The Club

acknowledges with thanks the work and interest of retiring councillors, Diana Laubitz, Chuck Gruchy and Jack Gillett. Diana and Chuck have been Council Members since 1976 and 1973 respectively, and have held several offices over the years. Members will recall that during the year Gordon Hamre and Stephen Gawn were also lost to the Council.

At the Council meeting, January 14th, Committee Chairmen were appointed as follows:

Standing Committees

Executive
Awards
Conservation
Excursions and Lectures
Finance
Membership

Frank Pope (829-1281)
Bill Gummer (596-1148)
Lynda Maltby (821-2939)
Philip Martin (729-3128)
Bill Arthurs (225-6941)
Barbara Campbell (839-3418)
Ron Bedford (733-8826)

Other Committees

Publications

Birds
Education and Publicity
Macoun Field Club
Nominating

Bernie Ladouceur (729-9471) Betty Marwood (692-4195) Don Fillman (828-2029) Barbara Campbell (839-3418)

Our Federation of Ontario Naturalists representative is Dan Brunton. $\ensuremath{\mathtt{p}}$

Federation of Ontario Naturalists Report Stew Hamill

The December 8 meeting of the Federation of Ontario Naturalists Board of Directors featured a new procedure - discussion of financial and policy matters in the morning, committee meetings during the lunch break, and committee reports in the afternoon. As usual, the day passed quickly; there never seems to be enough time to cover all the exciting ventures of the FON.

The major item on the morning agenda was a discussion of Canadian Wildlife Service cutbacks, led by our own Roger Taylor, chairman of the new FON Conservation Committee. Club representatives were urged to raise the issue among their respective

club members. The most promising result of this session was a suggestion that the FON take over the soon-to-be-closed Wye Marsh Wildlife Centre. This move would be a tremendous coup for the FON to assume operation of an existing interpretive centre on a cost-recovery basis. The image of the FON and its level of membership could reach new heights. The idea is to be explored.

The lunch break is designed to allow directors to meet in various committee groups, or to move from group to group as I did. One of my particular interests is the Membership Development Committee, which has the goal of encouraging both committed naturalists and others in the province to join the FON. This committee is attempting to acomplish this goal through displays, promotions and magazine inserts. It is through its size of membership that the FON derives its strength, influence and ability to achieve. Any naturalist in Ontario who is not a member of the FON should evaluate carefully his/her commitment to the protection of natural areas and resources in this province.

The second committee of particular interest to me is Nature Reserves. A major undertaking, the preparation of a Nature Reserves Policy Manual, has been completed, and copies were distributed. This manual contains maps, descriptions, background information, and those existing management plans for all FON Nature Reserves. Your club representative, Dan Brunton, and I have copies if anyone wishes to see one. Other discussion concerned recent acquisitions and bequests, possible disposals, and potential future acquisitions of nature reserves.

The third committee which will involve me is the Resolutions Committee, as I was appointed the new chairman to try to follow up the excellent work of Paul Eagles.

Those of you who are FON members will have received your 1985 Annual General Meeting and Conference insert in the winter issue of Seasons. The program, May 24-26 at McMaster University in Hamilton, includes botany, bird, canoe and hike outings to local natural areas (such as Spooky Hollow and Cootes Paradise), presentations on local natural history (such as Crawford Lake and the Niagara Escarpment), displays, the photo salon, and the banquet.

For those of you who are not FON members, it is not too late to join and get in on the fun and action. The annual membership (\$21. for individuals, \$26. for families, \$15. for students, \$13. for seniors) includes four issues of Seasons. Applications for membership should be sent to The Federation of Ontario Naturalists, 355 Lesmill Road, Don Mills, Ontario M3B 2W8. \uppsi

Ottawa Regional Science Fair

Ken Taylor

Each year The Ottawa Field-Naturalists' Club presents special awards to selected exhibitors at the Ottawa Regional Science Fair. The fair consists of scientific experiments, collections, and other projects produced by Ottawa-area students in grades 7 to 13. In 1984 the fair ran from April 6 to 8 at its permanent home, the National Museum of Science and Technology.

The OFNC First Prize was awarded to Amanda Tower of Immaculata High School for her experiments on the effects of irradiation of seeds on plant growth. For her efforts she received a cash prize of \$70. Amanda is on a bit of a roll; she was a cowinner of the Club's First Prize at last year's fair! I believe that this is the first time we have had a repeat winner.

Second prize and \$50 went to Hee-Yun Park and Christine Kenney of Alta Vista School for their interesting project on mushrooms. Christine seems to be reviving "All in the Family"; her brother, Mike, was a co-winner of an OFNC award in 1982.

Helen Ford of Greenbank School took Third Prize and \$30 for her exhibit of molds and their growth on various substrates.

In addition to the cash prizes, each winner received a oneyear membership in The Ottawa Field-Naturalists' Club. Special award judges at the fair were Barbara Campbell and Ken Taylor.

The Ottawa Regional Science Fair is always great fun and very informative, and it is an excellent way for students to "get involved" with science. The fair will be held on April 12, 13 and 14 this year at the National Museum of Science and Technology on St. Laurent Boulevard. Why don't you come to the fair, and bring the whole family? You'll be glad you did! ¤

Trail & Landscape Circulation

Circulation of the January-February issue was as follows: a total of 1085 copies was mailed, 1054 of them to members, subscribing libraries and other institutions in Canada. Thirty-one copies were sent outside Canada, 27 of them to the United States. The cost of postage for that mailing was \$65.52 (second class) for the 56-page issue.



V. Bernard Ladouceur

Have you ever wondered why Recent Bird Sightings usually begins with a description of the weather? Probably not, but I thought that it might be interesting to begin the article with that question. The November-December 1984 period certainly illustrated that weather can play an extremely important role in the fortunes of birds' (and birders'!) lives.

The northeast coast had its mildest December in 45 years, causing many species to linger much later than usual. But, it was a cool day indeed which produced one of the greatest days (if not the greatest day) in Ottawa birding history.

November 12 was a Monday and for some fortunate birders a day off work (to make up for Remembrance Day which fell on the Sunday). It was estimated that between 2,000 and 3,000 loons flew over Lac Deschênes that day. Most of the birds were Common Loons, of course, but this total may have included hundreds of Red-throated Loons.

A sample of initial reactions of the birders experiencing the event follows...

Approximate words uttered

"...I see a flock of something." "What are they?"

"I don't know."

Simultaneous thoughts

"They look like loons, but there can't be 80 in one flock!"

...later as another flock flies over...

"They must be mergansers."

"Must be Red-breasted (Mergansers)."

"Could they be Red-throated Loons?

"They sure look like loons."

"Why are we having such trouble with fairly routine identifications?"

"I'm so confused."

...logic prevails?...

"Mergansers fly in formation they're loons."

"I still don't believe this is happening."

Sometimes, unfortunately, you refuse to trust your first impressions (i.e. an experienced observer can identify a loon in flight at a considerable distance) because logic "seems" to defy the event being witnessed.

Finally, it was obvious that thousands of loons were moving through the Ottawa area. (*The Shrike* data has the recent high at around 60 Common Loons observed November 12, 1983 - but note the date.) Most flocks appeared to be 100% Common Loons. Could we have seen a flock of 100 Red-throated Loons?

Later that day, 1400 Common Loons on Lac Deschênes were joined by a flock of 50 Red-throated Loons. Suspicion confirmed - segregation did occur.

Actually, any birder who understands anything about weather would have realized that the day held great potential. High pressure systems out of the northwest in autumn have a habit of creating great birding days.

Rarities are what gets a birder's blood pumping and adrenalin flowing. What was out there? Common Eider? Kittiwake? Jaeger? Defintely a day for Golden Eagles. Sabine's Gull? Wouldn't a Ross' Gull be great (and highly improbable)! Maybe a fulmar!?

The above was partly my speculation; unfortunately it was not my experience. However, should they receive adequate documentation, two new species will have been added to the Ottawa Checklist: Great Cormorant (Britannia Point) and Northern Fulmar (over land, following the Ottawa River valley near Woodlawn; see separate article in this issue). In addition to these birds, both Black-legged Kittiwake (Britannia Point) and Golden Eagle (Constance Bay) were seen.

Why such an occurrence? There were two theories proposed. (It should be stated that Golden Eagle should not be considered part of this discussion since it does not rely on waterways. It obviously came out of the northwest.)

The majority felt...

After a period of mild temperatures, a high pressure system heralded a quick freeze in areas north and northwest of here and forced birds to vacate.

Problem: There are no Great Cormorants north or northwest of here. How can one explain its presence?

A minority suggested...

Extremely mild temperatures preceded the cold front. Easterly systems were present along the St. Lawrence River for several days. These systems may have brought birds in from the Gulf of St. Lawrence.

Problem: All the species involved are easily explained,

but, it is doubtful that such numbers would be forced this far inland; that is, we didn't have hurricane- (or gale-) force winds out of the southeast for several days.

Things are black and white when broken down into their smallest components; however, smallest components are often hard to determine.

Perhaps it is a combination of both theories. Perhaps the vast majority of birds were forced south or southeast by a quick freeze and northwesterly winds, and a few stray, confused birds followed the easterly systems up the St. Lawrence and up the Ottawa, only to be stopped by a fierce cold front. This situation would explain the Great Cormorant. The loons could come from either direction; however, such numbers almost (I emphasize almost) certainly came out of the north. The Northern Fulmar and the Black-legged Kittiwake may have come from either direction. The whole puzzle is fascinating, and perhaps - perhaps - the preceding explanation is close to reality.

Needless to say, all of the birds were gone the next day.

Virtually uninterrupted mild temperatures were present throughout this period. This condition, in conjunction with an excellent wild food crop, open waterways, and light snow cover, allowed many birds which had either lost the urge to migrate or were sick or injured, to survive. Successive cold nights would have killed most of them. Among the more unusual lingering species were Hermit Thrush, Winter Wren, Brown Thrasher, Swainson's Thrush, Black-throated Green Warbler, and Savannah, Vesper and Fox Sparrows.

Additional highlights of the period include a Cattle Egret at Cook Road Dump on December 1st, a Pomarine Jaeger at Ottawa Beach on November 14th (only the third sighting ever), a Blacklegged Kittiwake at Stillwater Pier on December 1st, a Hawk-Owl near Moodie Drive and the Queensway on December 13th, and a Carolina Wren regularly visiting a feeder in Aylmer. Finally, it should be stated that we are currently enjoying the best winter in recent memory for White-winged Crossbills.

Space does not permit a more exhaustive discussion. For more information, consult the November-December 1984 issue of $\it The\ Shrike$ and the Christmas Bird Counts summary beginning on page 68. $\it p$

A Sight Record of Northern Fulmar in Southern Ontario

Bruce M. Di Labio, Richard R. Brouillet and Don J. MacKinnon

On November 12, 1984, while birding near Woodlawn, Ontario (25 km west of Ottawa), one of us (R.B.) observed a gull-like bird in the distance flying in a southeastern direction. He alerted the others in the party, and we all watched the bird as it flew almost directly towards us. The bird came within an estimated 50 m. We noted the following field marks: short, thick neck; stocky body; short, thick bill; short, rounded tail; gray mantle; and white underpart and wing linings. The wing shape was long and narrow, unlike the typical wing shape of a gull. The flight pattern was a series of stiff, shallow wingbeats alternating with glides. These field marks led us to the conclusion that the bird was a light-phase Northern Fulmar.

The weather at the time of the observation (about 12:30 p.m.) was overcast with the cloud ceiling below 300 m. The wind was from the northwest at 10-25 kmph. The temperature was about 2 degrees C. The light conditions were bright thus enhancing the observation of the shape and colours.

The Northern Fulmar is a bird of the open oceans. It has a discontinuous, circumpolar distribution, and breeds in colonies in the Atlantic, Pacific and Arctic Oceans (Godfrey 1966). Inland records of this salt water species are worthy, therefore, of special note. The presence of this bird is most likely the result of weather disturbances in the Gulf of St. Lawrence or Hudson Bay.

There are six previous records of Northern Fulmar in southern Ontario (James, McLaren and Barlow 1976). A misprint in that reference places the 1928 record in Ottawa; in fact, it was from the Ontario side of the Ottawa River near Pointe Fortune, Quebec, some 100 km east of Ottawa (Snyder 1929).

Literature Cited

- Godfrey, W.E. 1966. The birds of Canada. Bulletin 203, National Museums of Canada. 428 pp.
- James, R.D., P.L. McLaren and J.C. Barlow. 1976. Annotated checklist of the birds of Ontario. Life Sci. Misc. Pub., Royal Ontario Museum. 75 pp.
- Snyder, L.L. 1929. Second Ontario record for Fulmarus glacialis glacialis. Auk 46: 376. \uppsi

Fourth Annual Christmas Bird Count Roundup 1984-1985 period

Astrid and Bruce Di Labio

This year the weather again played an important role in the success of the Ottawa area Christmas Bird Counts. A very mild fall with relatively warm temperatures and a very good wild food crop apparently influenced many birds to stay until the count period began. Over the count period (December 15 to January 2), however, the weather gradually deteriorated with a corresponding decline in the success of the counts. Record totals of 97 species and 47,550 individuals were reported this year, mainly due to the success of the Ottawa-Hull Count.

The Ottawa-Hull Count was held on December 16, 1984. The results from 115 field observers and 95 feeder watchers were compiled by Christine Hanrahan and Bernie Ladouceur. A new record high number of species, 89, surpassed the old record from 1973 by nine. The mild weather and excellent count conditions were probably responsible for the high diversity this year. The highlight of the count was an unexpected Black-throated Green Warbler at Deschênes Rapids.

The Pakenham-Arnprior Count took place on December 26th and involved 39 participants; Michael Runtz was the compiler. High winds during the morning caused some problems in locating birds. Despite the difficulties, 49 species were recorded, one of the highest totals ever. A Vesper Sparrow was the highlight of the day.

On December 29th, the Carleton Place Count was held. Twenty-five field observers and 36 feeder watchers participated, and the compiler was Arnie Simpson. Freezing rain the night before left the roads coated with ice in the early morning. Heavy fog developed in the mid-morning and remained until dusk. The birds cooperated, however, and a record total of 50 species was found, easily breaking the 1974 record of 45. There were three new species and 11 record highs for the count. The highlight was a Savannah Sparrow.

The final count was Dunrobin-Breckenridge, held on January 1, 1985. It was compiled by Bruce Di Labio. Snow, freezing rain and 60 kmph winds combined to make birding almost impossible. The 17 field observers and five feeder watchers turned up a record low 38 species. There were four record highs and one new species. In weather conditions such as those experienced on the count, seeing any bird would be a highlight.

Species	Ottawa- Hull	Pakenham- Arnprior	Carleton Place	Dunrobin- Breckenridge		
Common Loon	***	-	-	-		
Pied-billed Grebe	***	_	_	_		
Red-necked Grebe	2***	-	-	-		
Great Blue Heron	-	-	1	-		
Canada Goose	502*	-	-	-		
Wood Duck	1	-	-	-		
American Black Duck	786*	-	-	18		
Mallard	292*	-	-	2		
Ring-necked Duck	2	-	-	-		
Greater Scaup	1 4*	-	-	-		
Lesser Scaup	4^ 6***	-	-	-		
Oldsquaw Surf Scoter	1**	<u>-</u>	-	-		
White-winged Scoter	-	- **	-	_		
Common Goldeneye	501*	-	1	- 3*		
Barrow's Goldeneye	1	_	-	-		
Hooded Merganser	5*	_	_	-		
Common Merganser	54	2	12	_ **		
Red-breasted Merganser	2	-	1	-		
Bald Eagle	_	**	_	_		
Northern Harrier]**	-	_	_		
Sharp-shinned Hawk	4*	6*	_	_		
Cooper's Hawk	4	-	_	_		
Northern Goshawk	5	6*	_	_		
Red-tailed Hawk	6	2	3	1		
Rough-legged Hawk	4	6	ĺ	2		
American Kestrel	10	-	i	1		
Gray Partridge	132	32	5	40		
Ring-necked Pheasant	2	-	-	-		
Ruffed Grouse	50	35	4	11		
American Coot	J*	-	-	-		
Ring-billed Gull	53*	-	-	-		
Herring Gull	1,870*	-	3**	-		
Iceland Gull	7	-	-	-		
Glaucous Gull	31	-	-	-		
Great Black-backed Gull	69	-	-	-		
Rock Dove	4,568	523	399	89		
Mourning Dove	106*	25	30*	4		
Eastern Screech-Owl	1	_	3*	_		
Great Horned Owl	28	4	6	1		
Snowy Owl	1	3	_	<u>-</u>		
Barred Owl	2		2*	-		
Northern Saw-whet Owl	j***	_	1	-		
Belted Kingfisher	2***	-	-	-		
Downy Woodpecker	133	37	76	14		
Hairy Woodpecker	100	39	80	24		
Black-backed Woodpecker	2	-	-	-		
Northern Flicker	5*	-	-	-		
Pileated Woodpecker	14*	8	4	2		

^{*} record high
** new species for the count (therefore also record high for that species)
*** ties record high.

1984-1985 CHRISTMAS BIRD COUNT ROUNDUP (continued)

Species	Ottawa- Hull	Pakenham- Arnprior	Carleton Place	Dunrobin- Breckenridge
Horned Lark	5	28*	1	30
Blue Jay	663*	298	342	131
American Crow	1.716*	130*	194*	16
Common Raven	8	17*	-	3
Black-capped Chickadee	2,161	647	570	356
Red-breasted Nuthatch	104	69	4	9
White-breasted Nuthatch	155	64	132	24
Brown Creeper	47	2 3*	4	8
Carolina Wren	1	-	-	-
Winter Wren	1	-	-	-
Golden-crowned Kinglet	26	146*	10	8
Ruby-crowned Kinglet	1	_	_	_
Swainson's Thrush]**	_	_	_
Hermit Thrush	***	_	_	_
American Robin	71*	-	5	-
Bohemian Waxwing	_	-	17	-
Cedar Waxwing	403*	262*	98*	1
Northern Shrike	8	4	_	1
European Starling	6,742*	745	508*	22
Yellow-rumped Warbler	2	-	1	+
Black-throated Green Warbler	**	-	-	-
Northern Cardinal	51	1	2	2
American Tree Sparrow	477*	256*	329*	98
Chipping Sparrow]***	-	-	-
Vesper Sparrow	-]**	-	-
Savannah Sparrow	_	-]**	-
Fox Sparrow	**	-	-	-
Song Sparrow	16	2	3	-
Swamp Sparrow	1	-	-	-
White-throated Sparrow	9	2	3*	1
White-crowned Sparrow	-	2**	1	-
Dark-eyed Junco	232*	319*	185*	154*
Lapland Longspur	20	1	~	-
Snow Bunting	1,059	1,295	755	108
Red-winged Blackbird	7	-	-	-
Eastern Meadowlark	_	2***	I**	=
Common Grackle	8	1	I	-
Brown-headed Cowbird	3	10	4	-
Pine Grosbeak	3	4	-	-
Purple Finch	363	384*	294*	68
House Finch	33*	2**	-	-
Red Crossbill	12	I	-	-
White-winged Crossbill	300*	1,145*	160*	56*
Common Redpoll	73		14	-
Pine Siskin	73	267	45	27*
American Goldfinch	1,591*	643*	388	140
Evening Grosbeak	174	635	580	381
House Sparrow	4,218	1,380***	493	183

^{*} record high
** new species for the count (therefore also record high for that species)

^{***} ties record high.

	Ottawa- Hull	Pakenham- Arnprior	Carleton Place	Dunrobin- Breckenridge
Total Individuals	30,216	9,516	5,778	2,040
Total Species	89	49	50	38
SUMMARY: TOTALS FOR THE	LAST FOUR YEARS			
·	LAST FOUR YEARS 1981-1982		1983-1984	1984-198
·			1983-1984 29,129	1984~1983 47,550

We would like to thank all the participants and compilers who again made the four Christmas Bird Counts in this area a success. Hope to see you all again next season.



Michael Runtz (left) and Bruce Di Labio during the foggy Carleton Place Count $\,$ photograph from a slide by Bruce Di Labio. $\,$ $\,$

THE ROBINS OF CASTLE HILL CRESCENT

Ross Anderson

The charade began at breakfast on April 15th. A male American Robin was fencing with himself in the window-glass, tilting with what he must have thought was a rival in his territory. We draped the windows with streamers of string and Christmas ribbon, but with no effect. He still came back, leaving off about the beginning of May.

His territory must have been protected well. On the fourth of May, Katharine spotted the female sitting on her nest. The nest contained four eggs. It was good luck that allowed us to see the female. She was perfectly still, about two metres away and about as high up on the bushy limb of a large spruce outside the dining room window.

The male was never far away. When the female left the nest, the male would arrive, stand on the edge of the nest and survey the contents with the most curious expression, head on one side, as if he expected action from one moment to the next. He never offered food to the female or sat on the eggs as far as we could tell.



First seen on the 4th of May, four nestlings were launched from this aerie by the first of June.

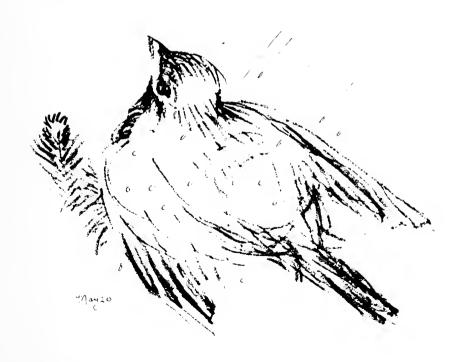
This routine went on for 13 days. On May 17th, we noted, "one nestling hatched"; the next day, "two seen in the morning and three in the evening". There was so much confusion in the nest that the fourth hatchling could not be confirmed until five days later.

On May 17th also, the male and female appeared for the first time on the edge of the nest together. Since some babies have longer necks than others, we wonder how all manage to get fed.

Father robin brought his share of worms but did not sit on the nest. He would stuff two gaping mouths then wait for the inevitable product, which he devoured. Mother robin did the same, with the result that the nest was always clean. Occasionally, mother robin pecked energetically at the bottom of the nest as if arranging ventilation.

Baby robins must be about the homeliest offspring possible. Only a mother robin could love the little blind muppet head sticking out of the nest beneath a coverlet of robin-down feathers.

One day we observed what happens when it rains. Mother robin plays the role of an umbrella. With wings spread out, she sat through the storm while water fell. It rolled on her feathers and dropped to the ground, never touching the nest or its inhabitants. (See below.)





On May 26th we noted, "eyes open, still four left but very crowded!" By May 28th the nestlings were mostly feathered, with comical, wispy tufts of dishevelled down remaining around the head. Mother still sat on the nest, but the neatness was gone; there was always a rump, or a beak and a pair of eyes hanging over the edge.

Two days later, "one gone, three left and very little room for wing stretching exercises". Followed by, "another baby robin escaped the nest and sat all day in the cedar hedge outside the kitchen". June lst, a.m., "and then there was one and by evening none at all!"

The family was gone. We saw them occasionally again for a couple of days, or thought we did. Now there is only the nest, still solid, filled with snow. Our reference books say the robin may build on the same nest again another year. Would anyone care to watch with us on the 4th of May, 1985?

Background Reading

Harrison, H.H. 1975. A field guide to birds' nests in the United States east of the Mississippi River. Houghton Mifflin, Boston.

MacDonald, M. 1947. The birds of Brewery Creek. Oxford University Press, Toronto. This book is a classic, a delightfully written guide which all Ottawa field naturalists should read just for pleasure.

Winter Kill of Fish in Mud Lake

Jack Halliday

April 12, 1984, was a lovely sunny day, so I took advantage of it for a walk through the Britannia Woods. I soon noticed that the lake was more odoriferous than normal. When I approached the shore, I soon saw the reason, thousands of dead Bullhead (Barbotte), mostly on the bottom, but a few floating. I also noted a number of large, dead Carp floating.

Perhaps the deep snow of the winter, which prevents sunshine and oxygen from entering the water, resulted in such a shortage of oxygen that the fish died. I have noticed a similar death of fish in Dow's Lake in winters of deep snow.

I suspect that the entire population of Bullhead was exterminated as the sizes ranged from 5 cm to 30 cm. Some of the dead fish had been partially eaten by animals, probably raccoons, rats, squirrels, mice, and so forth. I was surprised that the gulls were not feeding on this abundant food.

There were a few patches of ice on the lake, so it must have thawed only recently. There were few birds in the area; robins, crows, starlings, Song Sparrows and a Tree Sparrow were all I saw. There were two pairs of American Black Ducks on the lake; I also saw two Beaver and two Muskrats.

An interesting discovery was a hive of honeybees in a dead elm. The bees were active with about one bee per second coming or going. I didn't see any butterflies (not surprising after the sharp decline in most species in the area the year before). In

Endangered Species in Ontario

The Ontario Ministry of Natural Resources has produced two posters of special interest to naturalists. One poster describes the endangered birds, snakes, plants, butterfly and mammal designated under the Endangered Species Act, 1980. The other poster, enjoy us, do not destroy us, is a watercolour representation of some of our more attractive wildflowers.

The Club has a small number of both posters available for anyone who can use them for teaching or displays. They may be obtained from Joyce Reddoch (749-5363).

Out Damned Spot!

Brian W. Coad
Ichthyology Section
National Museum of Natural Sciences
Ottawa KIA OM8

The spot distribution map is one of the better ways of depicting the distribution of organisms. It gives a readily assimilable picture of where a particular species can be found, and unusual or isolated populations can be "spotted" easily and marked down for further investigation.

One of the more valuable contributions to ichthyology in recent years was the Atlas of North American Freshwater Fishes (Lee et al. 1980), a tome containing approximately 775 distribution maps and, consequently, a very large number of spots. These distributions were based on specimens examined, museum records and reliable literature sources. Peripheral and suspect records were examined carefully to exclude errors. I was somewhat surprised, therefore, to see a suspicious blob on Ottawa for the Longear Sunfish (Lepomis megalotis), a species not recorded for the National Capital Region despite field work for many years by my colleague at the National Museum, Dr. Don E. McAllister, and even some damp excursions of my own (see McAllister and Coad 1974).

Several possibilities suggested themselves to explain the spot. It might be a printing error, an error of identification, an error of locality, or a valid record. The journey from author to printer is a hazardous one, and the convenient rub-on symbols used by some authors have been known to come unstuck and re-attach themselves to create new distribution records. In addition, the spot marking a city is sometimes mistaken as a record of distribution by compilers. A letter to the compiler of the Longear Sunfish account in the Atlas brought the reply that the record was based on specimens preserved in the Museum of Comparative Zoology at Harvard with the label information "Blanchard River, Ottawa". Thus, the possibility of printing errors could be eliminated. The specimen identification was confirmed by a letter to Harvard, the fish having been examined by several competent ichthyologists since their capture in 1893.

I now had an excellent excuse to leave the office and see if the Longear Sunfish still existed near Ottawa. A Blanchard River was found near Val-des-Bois, Quebec, explored and sampled, but no Longears were found. A nearby hatchery proved to be of recent date; therefore, the 1893 specimens could not have been an introduction from hatchery fish. The Blanchard River was somewhat remote from Ottawa, but old locality data can be very spare in its wording.

There the matter rested, an unusual distribution outside the normal range for the species, unconfirmed by any other collection than the original, and a lingering suspicion left in my mind. Then the compiler of the Longear Sunfish account wrote to me to say that there was a Blanchard River in Ohio and there it flowed through the city of Ottawa, well within the normal range of the species. The fish in the Harvard Museum had been collected by Philip H. Kirsch, and the collections and localities had been described by him in 1895. Since 1895 the leap had somehow been made from Ottawa, Ohio, to Ottawa, Canada. I should have checked for other Ottawas and other Blanchard Rivers, and the compiler should have queried this unusual distribution. An interesting and beautiful member of the sunfish family could not be added to the National Capital Region fauna.

The moral of this tale is simple. Specimens in collections are only as good as their data. We museum people would plead with anyone giving us specimens for permanent storage to include full locality data. All that was needed in this case were the four letters OHIO and much time, effort and error could have been saved. Still, I wouldn't have had a pleasant, sunny day in the field.

Acknowledgements

I am indebted to Bruce H. Bauer, Georgia, for apprising me of other Ottawas, Karsten E. Hartel for information on the specimens in the Museum of Comparative Zoology, Harvard, and Thomas A. Edge for help in seining the Blanchard River (the one in Papineau County, Quebec, Canada, 45°55'N, 75°35'W!).

Literature Cited

- Kirsch, P.H. 1895. A report upon investigations in the Maumee River Basin during the summer of 1893. Bull. U.S. Fish Comm. 14(1894): 315-337.
- Lee, D.S. et al. 1980. Atlas of North American freshwater fishes. North Carolina State Museum of Natural History, Raleigh. 854 pp.
- McAllister, D.E. and B.W. Coad. 1974. Fishes of Canada's National Capital Region / Poissons de la Région de la Capitale du Canada. Fisheries Research Board Canada Misc. Spec. Publ. 24: 1-200.

Philopatry and Innis Point Returns

Joanne Dean

Most animals exhibit some tenacity either to their natal area or to their breeding grounds. In the avian world it is often the male that returns to the same spot year after year.

The theory of philopatry states that the male has more to gain through foreknowledge of an area as it is he that must choose the territory and then defend it against intruders (Greenwood 1980). The female tends to choose her mate and then rely on him to protect the nest area; thus she has less to lose by not knowing the area. Among animals the reverse is often the case: the male tends to wander and leave the female to rear the young, making it more advantageous for the female to know the area well.

For young birds the theory states that they tend not to return to their natal area in succeeding years with the same frequency as the adults (Greenwood 1980). Once the juveniles can look after themselves they tend to disperse to neighbouring areas or start their slow journey south. In some cases they are pushed out by parents anxious to raise a second family. In this way the young learn about areas other than their natal site.

At Innis Point, the Ottawa Banding Group catches many breeding birds and their young. For some species, the above theory holds and for others it does not. (See Table opposite.) Among the breeding species caught at the Point, the theory that adults return with greater frequency than juveniles appears to hold better than the one suggesting that males return more often than females.

The notable exceptions to the age aspect of the theory are the Song Sparrow and the Yellow Warbler. The relatively large number of juveniles returning the following spring in the case of these species could be attributed perhaps to the fact that their young remain at Innis Point for a relatively long period of time after fledging. That they do remain for a long period is indicated by the number of times some of the juveniles are retrapped in their first year. Evidence against this explanation is the fact that large numbers of juvenile Gray Catbirds are also retrapped their first year, and yet not one has returned to Innis Point in a succeeding breeding season.

For most of the species listed, more males return than females, although the difference is less striking than that associated with the age question. This difference probably

Table 1

THE 1984 RETURNS TO INNIS POINT

Species			No. Banded					No.		
	1982	1984	1983	1984	Adult	Juv	U	M	F	U
Spotted Sandpiper	21		56	5.4	3					3
Pileated Woodpecker			1	100	1				1	
Hairy Woodpecker	13	15.4	8			2			1	- 1
Downy Woodpecker	27	7.4	32		I		1	2		
Eastern Wood-Pewee	15	6.7	21		- 1					1
Great Crested Flycatcher	21	4.8	27		1					1
Tree Swallow	245		63	1.6	1			1		
Blue Jay	25	12	25	4	4				3	1
Black-capped Chickadee	285	8.4	573	3.3	15	11	17	1	1	41
White-breasted Nuthatch	1.1	9.1	8							
Brown Creeper	30		50	2.0	1				1	
Veery	20	5.0	55	1.8	2			2		
Wood Thrush	8		17	11.8	2			2		
American Robin	112	8.0	104	8.7	14	4		14	4	
Gray Catbird	111	1.8	112	4.5	7			4	2	1
Cedar Waxwing	167		214	0.5	1					ı
Warbling Vireo	22		4.1	4.9	2				2	
Red-eyed Vireo	42		101	2.0	2			2		
Nashville Warbler	98	3.1	127	2.4	6			4	1	1
Yellow Warbler	246	2.4	329	6.1	11	15		12	12	2
Chestnut-sided Warbler	17	11.8	40		2			2		
Black-and-white Warbler	36	2.8	56	1.8	2			1	- 1	
American Redstart	29		33	3.0		1			- 1	
Ovenbird	59	1.7	122	2.5	3	1		3	1	
Mourning Warbler	8		21	4.8	1			1		
Common Yellowthroat	33		50	6.0	3			2	1	
Rose-breasted Grosbeak	78	5.1	99	3.0	6	1		- 1	6	
American Tree Sparrow	6		50	4.0	2					2
Song Sparrow	237	3.0	199	5.0	6	9	2	8	2	7
White-throated Sparrow	207	1.4	293	0.7	3	2		2	- 1	2
Red-winged Blackbird	195	3.6	226	3.5	10	5		7	6	2
Common Grackle	22	4.5	22		1			I		
Brown-headed Cowbird Northern Oriole	12 117	4 4.3	25 90	16 8.9	4 13	ı		4	1 5	3
				0,7				_		,
Purple Finch	12	8.3	25		1			1		
American Goldfinch	38	5.3	72	2.8	4			2	2	
Totals					136	52	20	84	42	69

occurs because the female also gains from returning to an area she knows. It has been found among Great Tits in England that females successfully raising a brood have a higher tendency to return to the same area than females that are unsuccessful (Greenwood, Harvey and Perrins 1978).

Five of the six Rose-breasted Grosbeaks returning to Innis Point were females. In this species, the male and female take turns incubating the eggs, so perhaps the female plays a larger role in defending the territory. No plausible explanation for the high return rate for juvenile female Red-winged Blackbirds and Yellow Warblers can be given. All the Blue Jays that returned were females. This species is a year-round resident; therefore, different factors, perhaps winter range and food, may have a strong effect on their dispersal.

It is unfortunate that Spotted Sandpipers cannot be sexed easily. In this species, the female is promiscuous and the male incubates the eggs and rears the young. One would expect, therefore, that only the male would return.

Brown-headed Cowbirds parasitize other birds' nests, and, although one might have thought that this species would act differently, the philopatry theory still seems to hold.

It is only through more banding and years of coverage that we will really be able to see how the breeding species at Innis Point fit the philopatry theory. The return rates of the breeding bird species to Innis Point are actually higher than the table indicates because both migrants and summer residents are included in the total number of birds banded. At present it is impossible to separate accurately summer residents during the spring overlap period. This difficulty is further complicated as many of the summer residents learn where the net lines are and avoid being caught after the first time.

Included in the table are some interesting returns. The Great Crested Flycatcher has been caught in each of our three years of operation. It has been caught only once each year, and these captures have all occurred within three days of May 18. Whether this bird is a migrant or a summer resident is not known.

The return of a Cedar Waxwing from 1983 was a surprise. This is a species that usually shows no site tenacity. It is largely dependent on a variable food supply (berries) and, as a result, remains in an area only if there is an ample food crop. It is more usual for waxwings to breed at sites hundreds of kilometres apart in succeeding years. The Ottawa Banding Group has had one recovery of a waxwing. This bird was found dead in Swanton, Ohio, on July 31, 1983, having been banded at Innis Point the previous year in August.

The American Tree Sparrow does not breed at Innis Point. The returns listed represent birds that have returned to the same wintering site. In the case of one bird, Innis Point may be only a migration stopover. This bird was banded on April 10, 1983, and has since been caught on April 23, October 22 and December 30 in 1983, and April 23 and November 15 in 1984.

Currently, the Ottawa Banding Group is banding at the bird feeder at Innis Point for a second winter and hopes to obtain more information on the use of the area by winter species.

Literature Cited

Greenwood, P.J. 1980. Mating systems, philopatry and dispersal in birds and mammals. Animal Behaviour 28: 1140-1162.

Greenwood, P.J., P.H. Harvey and C.M. Perrins. 1978. Inbreeding and dispersal in the Great Tit. Nature 271: 52-54. ¤

Just April

Now, while trilliums are threefold secrets, tight convolutions of green promise, I walk warily along soft trails, head bent to discover spring lilies, nodding elf-shapes rising slender from the patchwork carpet. A skein of movement reveals a poised head, flickering snake-tongue: then a smooth path, under the mottled leaves, opens for escape. In April, the mind hoards every petalled colour or quiet rustle - of wing, or grass, or leaf. Small sounds weave spells on tiny stages set with cool hepaticas in white, blue, lavender; Their pliant, hairy stems grown from rich leaf mold. The Lilliputian world of forest floor shivers with slate feathers and flashing junco's tail; with echoes of white-throated sparrow's song. I fear to crush spring beauties, pink-veined, their magic futile against a heavy tread. And soon, for want of daring, I retreat to the giant world - of concrete, steel, and glass.

Linda Jeays

The Ontario Breeding Bird Atlas: Ottawa Region

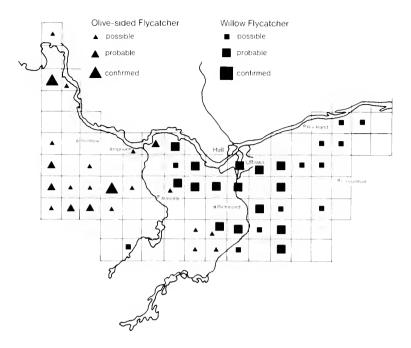
Christine Hanrahan

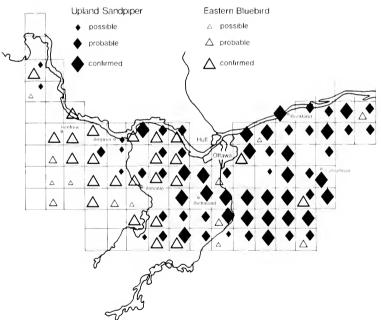
With 1985 the Ontario Breeding Bird Atlas (OBBA) project enters its fifth and final year. For those atlassers who have enjoyed their seasons in the field, the end may be viewed with regret. For the organizers, however, regret is perhaps a luxury they cannot afford for much yet remains to be done province-wide before the 1985 breeding season ends.

The Ottawa section (Region 24) of the OBBA project is in a somewhat more optimistic mood. Thanks to all the people who so actively participated throughout the 1984 season we can unequivocally state that the year was a great success. We thus look forward to 1985 with confidence and with full expectation of realizing our goals of complete and adequate coverage of all squares. Given the same cooperation and enthusiasm we have received in the past, such goals are entirely realistic.

Before explaining our plans for the 1985 season, I would like to review the accomplishments of the past year. As most of you know, Region 24 initially began with 77 squares. Gradually squares from other regions were reassigned to us, including, in early 1984, four from Perth (Region 25) and four from Cornwall (Region 23). The addition of these latter squares brought to 103 the total number of squares for which Ottawa was responsible last year. The start of the 1984 season, then, saw us with nearly 40 unatlassed squares to contend with. Undaunted, Ottawa atlassers turned out in force; as a result all but eight squares were atlassed to some extent. Five of these eight squares have already been assigned, leaving three with no "takers". These remaining three squares have less than 5% of their land mass within Ontario, thus presenting a special challange of their own.

The excellent response from atlassers generated a 92% coverage rate both for Region 24 proper (the original 77 squares) and for the extended area of 103 squares. A simple breakdown shows the following: total number of squares: 103; number of adequately covered squares: 73; number of inadequately covered squares: 22; number of squares with no coverage: 8. Adequate coverage for a square is defined as 82 species or more, with the following exceptions: those squares east of the Rideau River and south of Highway 417, where 72 species is deemed adequate given the available habitat in the area, and those squares only partially within Ontario (with a percentage ranging from less than 5% to roughly 65%).





The maps above, which show breeding information for four species, illustrate the knowledge gained in four years of work on the Ontario Breeding Bird Atlas.

To date, 172 species with some evidence of breeding have been found in Region 24. The breakdown is as follows: possible breeders: 11; probable breeders: 10; confirmed breeders: 151. Some of the more interesting observations this year include a Turkey Vulture nest with young, a Wilson's Phalarope with young, two more sightings of Loggerhead Shrike with young, and a Blackbacked Woodpecker and a Lincoln's Sparrow both in suitable habitat. Looking outside Region 24 to the other areas we atlassed, our records include Wilson's Phalarope and Lincoln's Sparrow again, as well as Rusty Blackbird and White-winged Crossbill.

1984 saw the start of a new venture, Wednesday evening square bashings, all of which were capably organized by Mark Gawn. On seven successive Wednesday evenings at 6 p.m., atlassers met at predetermined locations around the city from whence they were directed to the target squares. Through these efforts an average of 13 new species were added to each of the seven squares. These Wednesday evening square bashings will be continued in 1985 during June and July.

Two weekend square bashings were, likewise, a new activity for Ottawa. They were held in the Cornwall area in order to atlas the four squares assigned to us. They were quite successful in spite of the persistently rainy weather that plagued not only the weekend, but also many of the weeknight square bashings. Further such weekend excursions will be repeated in 1985, this time to the Algonquin area.

The Ottawa Region was fortunate in being awarded a small grant for 1984 from the James L. Baillie Fund for Bird Research and Preservation. This grant enabled us to pay gas money for those individuals willing to atlas far-flung squares but rendered temporarily impecunious. Thanks to the grant, teams were assembled, and several squares at either end of the Region were successfully atlassed. We will be applying for a similar grant this year.

Two well-attended meetings for atlassers were held at the National Museum of Natural Sciences, one in March and one in May. Mike Cadman, the provincial OBBA coordinator, was guest speaker at the May meeting and provided a lot of information on the Atlas project to date.

Looking to the year ahead, we see that as successful as last year was, work still needs to be done; consequently we have a full slate of activities planned in order to facilitate said work. On February 14 at the National Museum of Natural Sciences, a seminar was held on nocturnal species. A workshop designed to implement what was learned in the seminar will be held at a later date if interest warrants. A second meeting on April 4 will attempt to answer the various concerns and questions raised by atlassers over the past year and through the

questionnaire distributed to all atlassers at the end of the 1984 breeding season. (For further information on future meetings and all other functions, contact one of the committee members listed below.)

As a followup to the February 14 seminar, a number of specialized routes expressly designed to look for nocturnal species will be available. Each route will cover approximately four squares and will be assigned to interested individuals. Participants will be requested to cover their routes at least twice, preferably more often.

Because this is the last year of the Atlas project, all Regions are being asked to band together to lend a hand where necessary. Ottawa has been requested to take on an extra eight squares from the Algonquin Region and one each from Perth, Thousand Islands and Cornwall. As noted earlier, the weekend square bashings this year will be to Algonquin, where it is hoped that this method will enable us to atlas effectively this somewhat distant area. The addition of the above II squares brings to II4 the number of squares for which Ottawa will have supervisory control.

Our weeknight square bashings will continue, as noted, albeit with a slight difference in procedure. Rather than meeting at a specified location in Ottawa, atlassers will meet on the square itself. Our first outing will be on June 5 and the last on July 10; however, further square bashings may be arranged for the rest of July and into early August if circumstances warrant. Our objective with these square bashings is to bring to the acceptable minimum (or above) all those squares reasonably close to Ottawa not yet at 82/72 species.

Squares too far away to allow for evening square bashings will be assigned to willing volunteers (of whom we hope there are many). A number of squares are approaching the 82/72 species minimum, needing only one or two species to achieve the standard. Nonetheless, we would be happy to see most squares exceed 100 species. We know that for many of the squares in our area, particularly those squares in the western section of the Region, this is a real possibility given some extra effort. What we will need are the volunteers desirous of a challenge!

During 1985 the OBBA coordinating committee for the Ottawa area will consist of Christine Hanrahan, Chairperson (230-5290), Frank Bell (521-8046), Mark Gawn (820-8138), Roy John (226-2019) and Paul Jones (235-3632). For further information on any of the above activities, please contact one of the committee members, who will be more than pleased to assist you.

Apparent Predation on a Bat by an American Crow

Bruce M. Di Labio and Peter M. Dunn

On August 10, 1984, at 10 a.m. while birding near Andrew Hayden Park in Nepean, we heard an unusual sound coming from a flock of seven or eight American Crows. The crows were perched in a Cottonwood about 10 m above the ground, and the sound resembled the high-pitched vocalization of a hummingbird.

One of the crows then flew about 30 m to another tree. As it flew past, we could see a bat hanging out of the crow's mouth. When it landed, the crow made several movements with its head as if it were shaking or striking the bat against the tree. After five to ten seconds, the crow flew back to the original tree, and we had a clear view of one wing of the bat hanging from its bill. The crow disappeared into the foliage, and we did not see it clearly again. We presume the crow ate the bat.

Crows are known omnivores that obtain one-quarter of their diet from animal material (Bent 1946), but bats are not known as a regular food item for the American Crow. This is probably because bats rarely roost in places accessible to crows.

Literature Cited

Bent, A.C. 1946. Life histories of North American Jays, Crows, and Titmice. Bulletin 191, United States Nat. Mus., Washington, D.C. pages 236-237. ¤

Black Walnuts Available for Planting

The Society of Ontario Nut Growers (SONG) (Ottawa Chapter) has collected about 270 kg of Black Walnuts (estimated 10,000 to 15,000 nuts) from hardy trees in the Ottawa area. This stock is being prepared as seed and will be ready for distribution and immediate planting in the early spring.

Anyone wanting Black Walnut seed to plant should phone one of the members of the Seed Allotment Committee of SONG listed below and place their request as soon as possible. Cultural directions will be available when the seed is distributed. Telephone Gordon McArthur (487-2201), George Truscott (733-4745) or George Christie (733-6432). The Ottawa Field-Naturalists' Club contact person is Bill Gummer (596-1148).

Life Cycles: The World of the Little Brown Bat

Isabelle Nicol

The darkening sky was rent by the nasal "peent" of a night-hawk, and twilight deepened.

As the setting sun dipped below the horizon, brilliant shafts of light streaked the western sky edging the clouds with molten gold. Stars slowly twinkled on as a Black Tern danced with her reflection over the sunset-coloured waters of a wandering stream. Disturbed by her passage, tiny shadows resumed their aerial ballet, dimpling the surface of the slowly moving waters. Shadows on hushed velvet wings mingled with the shadows of the silent forest.

Not long released from its winter prison, the rich warm smell of the earth rose to blend with the sweet scent of new green growth and was blown about by a playful breeze. Along the bank of the stream, the breeze ruffled stands of cattails before moving on to an abandoned farmstead. There it circled in and around one of the decaying gray barns.

From within came faint sounds as the occupants began to waken, stretch, and prepare for the nightly forays. There was much twittering, bustling, flexing of wings, cleaning of soft furry bodies with small pink tongues.

Unhooking from their footholds, some of the bats began circling the inside of the barn. One female stayed where she was as she was about to give birth. Hanging from the rotting rafter by her thumbclaws, she stretched the skin which ran from her hindlegs and enclosed her tail, forming a small basket to receive the emerging baby.

During the previous fall she had mated, but the growth of the baby bat within her womb had not begun until she had awakened in early spring. All winter long while she slept, the sperm cells were held protected within her body. This past spring a ripened egg was released from an ovary and moved into the thick elastic uterine cavity within her body. There it was joined by a single sperm cell, and a tiny life began.

Now, in early summer, she was in labour. Once more, in the dank darkness dimly lit by the nearly cloud-covered moon, the muscles of her uterus began to contract. Closing her eyes she bared her teeth and began to breath more rapidly.

The birth of the baby bat would take about twenty minutes. In the past few weeks he had lain crosswise within his mother's body, but a short while before his birth had moved into a feet-down position. As soon as his lower legs emerged, he helped with his own birth by squirming, pushing, feet clutching at whatever they encountered, and as he emerged, he was caught in the cradle of her tail. Cool air enveloped him as his mother began his first thorough cleansing. He was a tiny naked bundle with a pug nose, mouselike ears folded over tightly closed eyes, and wings that were crumpled and weak.

Soft misty rain had begun to fall. The tiny mother finished his cleaning, and using his teeth, thumbs and toes, he began to climb across her furry belly. He found one of the two nipples high on her chest, and with his well-developed milk teeth, held tightly to it. With her baby gripping her, the mother bat reversed to her normal position, head down, and cleaned herself as the young bat filled his stomach with warm milk.

Then, as the rain continued to fall, she folded her leathery wings about the infant, and the young bat slept, enveloped in the warmth and security of his mother's embrace.

The old gray barn was home to a maternity colony of female bats and their young. While # some of the bats rested, others flew about in the darkness. Almost all of the bats remained clustered closely together near the roof beams where the young bat and his mother were, but a few crawled into crevices between boards, around the windows, or in the corners. All of these places gave the bats what they found most comfortable - darkness and the warmth of the sun. There was also the comforting warmth of their soft, furry bodies pressed closely together as the musty smell of hay drifted up from the hayloft. Illustrations by Tony Glen



OFIC S



Photography competition prize, Barry Flahey art print

Raffle!

The Ottawa Bird Banding Group raffle prizes, a Glen Loates Canada Lynx print and his new book, will be presented at the supper.

Place: Unitarian Church Hall

30 Cleary Street (See map elsewhere in this issue.) #51 bus stops at Redwood Ave. and Richmond Rd.

Reservations: To order tickets, fill in the order form and send it along with \$7.00 (\$3.50 for students under 18) per ticket before april 1 to:

The Ottawa Field-Naturalists' Club c/o Ellaine Dickson 2037 Honeywell Avenue Ottawa, Ontario K2A 0P7

dirée

Pot-luck Supper

Friday April 19, 1985

7:30 pm

Pot-luck

Every member attending will be required to bring one food item from the following categories as indicated on their ticket (quantity will also be indicated):

- meat dish
- vegetable dish
- buns or other bread item
- salad
- dessert

Refreshments (wine, nonalcoholic punch, coffee and tea) will be supplied.

Please Print

Natural History Art & Photography Exhibits

- This is *your* chance to display your talent.
- Photographic prints are eligible for prize.

Those wishing to contribute an exhibit please see notice elsewhere in this issue.

Name	
Address	
	phone
Please send me	tickets to the OFNC Annual Soirée at \$7.00 (\$3.50 r person. Enclosed please find my cheque or money order
	recipe and would like to have a ticket indicating a y, please note category here



In the first ensuing days of its birth, the young bat kept a firm grip on his mother's nipple and released his hold only when she left to forage in the countryside after dark. Left in the company of the other young bats, and missing the soft beat of his mother's heart, he squeaked loudly. Later, with his muzzle hidden in the veils of his tiny hands, he dreamed and his wings fluttered convulsively as he shivered and piped softly in his sleep. When his mother returned, she took him up once more, cleaned and nursed him, and again enveloped him in her soft wings. After two weeks, he would leave this protected position and hang beside her.

Several evenings later, he began to play with the other baby bats. They crawled over and under one another, chasing, play-fighting, pretending to bite. When the mothers returned, baby bats tried to crawl onto the first ones to land nearby, but each mother nuzzled and licked faces until she found her own.

Late one afternoon when the young bat was nearly a week old, his ears straightened up. Now his world was full of sounds. The squeaks, chirps, twitters and whirring of wings startled him. But he listened and learned. For the first time he heard clearly his own voice and his mother's answering call.

When his mother left that evening, he added his voice to those of the other young bats. And now that he could hear better, he knew at once when his mother returned. There was a whooshing of wings, a squealing of babies, a chirping of mothers. Anxiously and hungrily he approached his own mother, almost knocking her from the rafter in his excitement.

Covered with soft woolly gray fur, he now blended in perfectly with his surroundings. His 10 cm length included his tail, and he had a wingspan of 25 cm. His small, alert, mouse-like face was decorated with a short, pointed nose, rounded ears, and small black eyes. Although bats had enemies, they usually led peaceful lives, and barring an accident, he could live up to 20 years or more.

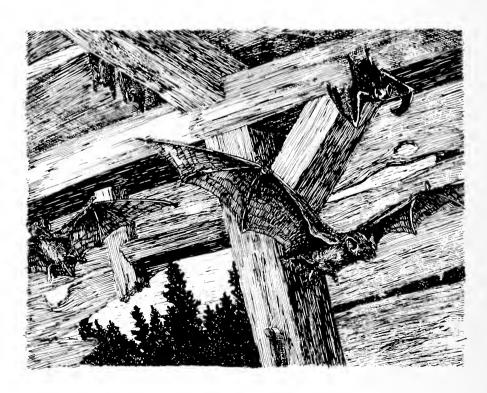
His tiny thumbs, with their small hooked claws sitting on the front edge of his forewings, were an important tool used for grasping when he lighted on an object and handy for cleaning his fur, which he now did himself. After nursing, he would hang by his toes, hold his head up, and with his long pink tongue lick every part of his body he could reach. Hanging by one foot, and frequently moistening the other hind foot, he quickly raked his toe claws through his fur, his mother helping him clean those parts he couldn't reach. He paid particular attention to his wings, sponging every centimetre with his long tongue. As he worked on the inside, he pulled the wings down over his head, the elastic membranes assuming weird, odd-looking shapes as his nose and head pushed against them.

He began to fan and flap his wings when he played. One afternoon when he was almost three weeks old, he wakened, yawned, stretched and moved his wings. His heartbeat and breathing increased. Ready at last, he spread his wings and released his toe claws. Quickly he flapped his wings up and down, and flying only a short way, landed against a wall. After a short rest he was in the air again. For a week he practiced inside the barn, every flight teaching him something new. Flying in circles, he often stopped near the barn's entrance.

Slowly, his squeaks changed to sounds so high they could no longer be heard. He began to echolocate, listening for the faint return of his cries as they bounced off the barn's walls, floor and roof. Each echo sounded different. He could tell which sounds bounced off other bats, and he never confused his own sounds with others.

His mother was still a big part of his world. Twice a day he nursed and snuggled close to her. He was nearly fully grown now and learned to make new sounds as he "talked" to her.

One dark night he left the barn for the first time, following his mother into the cool evening air. An owl was sitting in a nearby tree. It had come to know of the nightly forays of the Little Brown Bats, and quickly took advantage of the easy hunting.



For the first time in its short life, the little bat was aware of fear as he struggled to keep up with his mother. He felt the rush of air as the owl swooped down, brushing him lightly with one wing, and caught another bat as it too struggled to follow its mother. It was carried off, its cries cut short as the owl flew to its own nest. The young bat continued its flight, orienting himself in the dark by following his mother's cries.

The dusky air was filled with the sounds of a July twilight. At the edge of the stream, hidden in the reeds, frogs croaked, while across the still water floated the clear, sweet, flute-like song of a Wood Thrush.

The mother bat flew to the stream where the bats usually drank. Clouds of gnats danced above its surface. Twisting and turning, darting with lightning speed, she fed amongst them, transferring them from wing to mouth faster than the eye could see. Frequently she dipped to the surface of the stream to drink. There she skimmed the water, and on each down dip would lap up a few drops of water with the tip of her tongue. She continued doing this until she had had enough to drink. The young male tried to follow her but landed in a tree nearby squeaking his "I'm lost" cry.

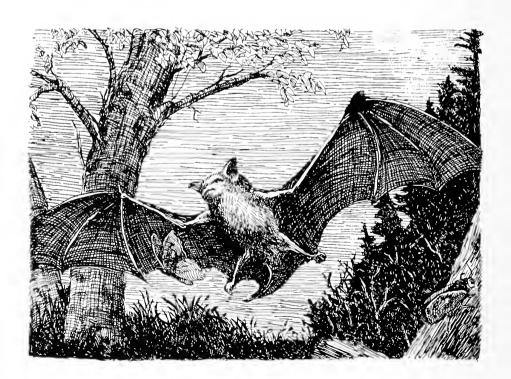
Quickly, the mother bat flew to him. He launched himself into the air again and tried to follow her but soon flew back to the tree. His mother was diving and zigzagging so fast he couldn't keep up. At last she returned to him, and he followed her back home, tired and hungry. In the barn he crawled close to her and nursed.

Soon, however, he too learned to catch insects as he quartered back and forth over the meadows, occasionally dipping down to the stream to drink or pick up a floating insect. The velvet-like skin of his wings made his flight silent and ghost-like. He seldom caught insects with his mouth but would bat them straight from his forewing into his mouth. Occasionally, in a effort not to miss his target, he would bend the skin which stretched from his hindlegs and enclosed his tail. Scooping an insect into this basket, he would then bend forward to grasp the insect with his jaws. He was constantly twisting and dodging in the air while he fed, so quickly his actions could not be seen. He was a big eater in relation to his size. By the end of each night he easily ate enough insects to equal half his body weight, food needed to provide the energy for his rapid flight.

Early one morning after he and his mother had gone their separate ways, he was roosting in an old hollow tree. Lower down the tree, other bats were also sleeping away the daylight hours. His sensitive ears picked up a scrabbling, scratching sound, and he roused fitfully from his deep sleep. He was vaguely aware that something was amiss but slowly drifted off

again into a deep sleep. However, that evening when the bats roused themselves and left to begin the night's hunting, three were missing. A Raccoon, foraging in the early morning hours, had happened on the hollow tree and made short work of the young bat's sleeping companions. Later, as he and many other bats swooped and hunted over a narrow river, another bat disappeared as a large fish lunged from under the water.

Later that night, after eating a large moth, he once again launched himself into the black, moonless night in search of further morsels. The little bat reeled and swooped between the trees, mouth agape, white fangs gleaming. Every second in flight his throat was emitting supersonic cries, a continuous rhythm of sound, pitched in a key too high for the human ear to hear. Even at rest he emitted supersonic pulses of low frequency, but the instant he started to fly, he began to "broadcast" at an increased rate, bouncing sounds off the tracery of leaves and branches in his path. At first his pulse rate was not great, but as he listened - if he picked up an echo from an obstacle in his path - he would increase the number of pulses a second. As the bat closed in on an object, the pitch of the returning vibrations would become higher and higher until the rate reached its peak as he turned to avoid it. As obstacles were passed, the rate steadily decreased.



His sonar detection was so sensitive he could alter course or deflect a wing after receiving echoes from objects only a few centimetres ahead. This explained why half a million bats could wheel around in a pitch-black cave for several hours without suffering a single collision.

His unusually sensitive ears were the factor which enabled him to swerve skillfully this way and that as the echoes of his voice bounced back to him. By the use of this sensitive sound-perception ability, the pattern formed by the echoes told him many things: the size and location of different obstacles; his relationship to these obstacles at all times; and whether they were fixed or moving, and if moving, in which direction. He could also pick up easily the buzz, buzz of mosquitoes and flies, and this was another method by which he was guided to a bit more food. Thus, the muscular activity in which the little bat engaged was truly remarkable. He navigated by listening, hunted with his voice, and saw with his ears.

Suddenly there was a change in the returning impulses. A small moth was flying three metres ahead. Size of target, location, direction of flight and speed, all were picked up by his ears and translated by his brain into meaningful information in a split second.

The high-pitched cries accelerated. He winged his way rapidly in the moth's direction, but the moth had already detected the vibrations of his pursuer. It intensified its zigzag flight, darting crazily up and down, in this direction and that. Guided by his own echo, the bat homed in on his prey, following every erratic move and dodging tactic.

The moth was doomed. Squeaking at a frenzied rate, the bat moved in for the kill. In another fraction of a moment the bat would intercept his moving target.

It was done. The bat's cries subsided as he flew to a branch, hooked into it feet first and hung head down to consume his victim.

Occasionally, he would home in on a moth which had the ability to detect his presence before he became aware of it. The moth would then emit clicks which would confuse the bat, as it appeared the sounds were coming from a different direction. Thus fooled, the moth would evade the bat by folding its wings and diving into vegetation.

Except for these losses, the hunting was good that night for there were many insects in the warm, humid air. Long before the first glimmer of dawn, no longer hungry, he fluttered back to the old tree and hung head down, limp, brown, leaf-like, his face wrinkled into a wide, tired yawn as he stretched, folded his wings at his sides, and soon dozed.

It was well into fall now, and nights were growing cooler. In the last few weeks, he had eaten many more insects than usual and had often eaten during the day, because insects were growing scarce and he could not find enough at night. He was now padded with extra fat in preparation for hibernation, and had already started his journey to the cave that had been used year after year by generations of his ancestors.

One fall night he arrived. The cave was one which was ideal for the hibernating bats, not too cool and not too warm. Its constant temperature and humidity offered protection from the weather outside. Humidity was essential to the bats for their membranous wings would soon become dehydrated if it dropped too low.

At first the bat flew in and out at night, restlessly, not yet content to commence hibernation. He drowsed his days away from the cave. One evening, however, he remained, and he squirmed tightly into a crack high in the ceiling of the cave. He hung head-down, with his wings folded close at his sides. In graytinted darkness he hung with hundreds more from the sloping roof, so closely packed that the rock was concealed by their black pod-like forms. By hanging in close clusters, they were able to reduce the amount of moisture lost from their bodies.

The bat's breathing grew less frequent until finally he was taking only one breath every five minutes. Another bat was breathing once every two seconds. The breathing of a third bat began increasing rapidly. First she took one breath every second; then two breaths a second; then three. Her eyes opened, and she stretched. Her activity seemed to communicate itself to the surrounding bats, and their breathing quickened. The first bat silently dropped and flitted through the gloom, and others soon followed until there were 50 or 60 of them whirring up and down the narrow cave, their wings whispering softly as they passed and repassed. Then the bats swooped up to the top of the cave, fastened themselves, licked their fur and wings briefly, and instantly relapsed into the drowsing of hibernation. The gloom of their hibernaculum contrasted oddly with the harsh light of the sinking sun outside.

Eventually the bat's body temperature dropped until it was the same as the damp, humid caves. He became covered with sparkling dewdrops of condensation.

The lowering of his body temperature reduced the chemical activity of his body. If the hibernating areas were too warm, the chemical processes of his body would continue at too high a rate. Consumption of stored fat would then also be too great, and, as a result, he would be apt to starve before the return of insects in spring. But if the temperature of the cave dropped too suddenly, the little mammal could freeze to death. However, a gradual lowering of the temperature would sound an inner

biological alarm and he would waken and fly to another spot in which the desired temperature was constant. But too much disturbance was dangerous and could result in too rapid a decrease in his body weight.

Winter came. Storms passed over the land, and the snow lay deeply on the ground. In the hushed and silent world of the cave, the bats continued their twilight existence. Although they slept during their summertime naps with wings aflutter, during the long slumber of hibernation, they were still.

One day came the far-off sounds of skeins of migrating geese. Buds of maple, oak and birch had been expanding for weeks in the wake of spring thaws. Insects returned to the air, and one warm spring day, movement passed through the mass of wintering bats. The Little Brown Bat became fully awake in less than 24 hours, drawing in his wings, stretching muscles and bones, and recognizing his sleeping companions with soft pipings and chatterings. Some of the other bats, however, did not move, nor would they ever move again. They hadn't been able to store enough fat before entering into their winter torpor, and at some time during that season of complete withdrawal, had simply died, remaining in their hanging positions. With the whirring of the wings of departing bats, these slightly mummified victims crumpled to silver-gray dust.

The Little Brown Bat left with the others and spent another warm summer coursing over fields and streams during moonlit nights and spending days under the bark of trees or sheltered in old abandoned farmsteads. That fall, once again he arrived at the cave he had hibernated in the year before. Again, restlessly, he flew in and out, unable to settle down. Now, however, he had reached maturity, and he mated with several females. Then, once more he rose to the ceiling, squirmed his small body in closely amongst a cluster of bats, briefly licked his fur and yawned hugely. Finally he passed into another winter of twilight sleep.



Recent Significant Plant Records from the Ottawa District

Part II. Pickerel-weed Family to Bean Family

Daniel F. Brunton 2704 Marie Street Ottawa, Ontario K2B 7E4

This is the second in a three-part series describing the significant vascular plant records in the Ottawa District which I have been able to make since the publication of Gillett and White's (1978) Checklist of Vascular Plants of the Ottawa-Hull Region, Canada. In Part I (Brunton 1985) I pointed out that only species noted as Sparse (4 to 12 collections) or Rare (1 to 3 collections) in Gillett and White (1978) would be discussed.

Each species name is followed by the common name on the Checklist and by the status statement noted in that reference. After a brief discussion of the species history and/or status in the District, I list the localities of the collections supporting these reports and the herbaria in which the voucher specimens are stored. I conclude with a statement of revised status if such is deemed necessary by the report.

If the scientific name of the species differs from that used in Gillett and White (1978), I have indicated their name in brackets following the new name. The taxonomic authorities are included in the scientific name only for those species new to the Checklist. In some cases I have departed from the status criterion used by Gillett and White (1978), i.e., determined solely by the number of specimens in the DAO and CAN herbaria. This situation occurs when a number of the specimens predate 1930. Thus, a species supported by eight specimens of which six predate 1930 would be revised to Rare from Sparse, with the phrase "old records" completing the revised status statement.

PONTEDERIACEAE PICKEREL-WEED FAMILY

Zosterella dubia (Water Stargrass) Sparse
- an obscure aquatic of calcareous waters that is found along the Ottawa and Rideau Rivers and inland in Ottawa-Carleton only in Stony Swamp, where it was probably carried to a beaver pond from the Ottawa River by ducks coming in to roost (Brunton 1982). Specimens: Manotick (CAN, DFB); Shirleys Bay, Nepean (DAO); Stony Swamp (CAN, DAO, DFB).

Revised Status: Uncommon along rivers, rare inland.

JUNCACEAE RUSH FAMILY

Juncus balticus (Baltic Rush) Rare, Gatineau Park and Britannia

- a halophytic plant of northern Canada that is spreading along highways in southern Ontario as a weed in wet ditches, etc. with other similar species (e.g. Carex praegracilis, Hierochloe odorata) and is becoming common in such sites along the Trans Canada Highway in the District (Brunton and Catling 1982, Catling and McKay 1980). Specimens: Queensway, Gloucester (CAN, DFB); Carp (CAN, DFB).

Revised Status: Uncommon along highways in Ontario; rare elsewhere in the District.

Juncus compressus (Compressed Rush) Rare, Ontario only

- like Juncus balticus (above) this European rush is becoming a
locally common weed of wet, calcareous sites in southern Ontario
(and elsewhere in North America - Stuckey 1981); known elsewhere
in the District from old collections from Rockcliffe and from
near Arnprior. It is particularly abundant at the Mississippi
River - Hwy. 17 site (Fitzroy Tp. below). Specimens: Queensway at Alta Vista (CAN); Hwy. 417, Gloucester (CAN, DFB); The
Burnt Lands (CAN, DFB); Fitzroy Tp. (DAO).
Revised Status: Sparse, Ontario only.

Juncus gerardii Lois. (Black Grass) New to List

- a characteristic plant of Atlantic coastal salt marshes, this species is being found as a weed in saline, disturbed sites in southern Ontario with increasing frequency (Catling and McKay 1980). It was first found in the District (at Victoria Island) in 1979 (Darbyshire 1982). Specimens: Victoria Island (CAN, DFB); Queensway at Maitland Ave. (CAN, DFB). Status: Rare, Ontario only.

LILIACEAE LILY FAMILY

Allium schoenoprasum (Wild Chives) Sparse

- a boreal calcicole that is found sparingly in southern Ontario
alvar sites (Catling et al. 1975) and that is known elsewhere
in the District only at extirpated sites (Brunton 1982). It is
also known as a garden escape. Specimens: Shirleys Bay, Kanata
(CAN, DFB); Stony Swamp (CAN, DFB); Low (DAO).
Revised Status: Rare (old record).

Convallaria majalis (Lily-of-the-valley) Sparse escape from cultivation

- an escape that is found in various wooded sites across Ottawa-Carleton (Brunton 1982, 1984b). Specimens: Green's Creek (CAN, DFB); Britannia Conservation Area (DFB). Revised Status: Sparse, Ontario only.

<u>Maianthemum canadense</u> var. <u>interius</u> Fernald (Western Mayflower)
New to List

- the variety of Mayflower found in western Canada, this calcicole is locally distributed in southern Ontario and is known elsewhere in the District only from Constance Bay and the Regional Forest (Brunton 1980). It may even be a distinct species (fide W.G. Dore). Specimens: Shirleys Bay, Kanata (CAN, DFB); Harwood Plains (DFB).

Status: Sparse, Ontario only.

Scilla sibirica L. (Squill)

New to List

- a commonly planted spring ornamental that spreads rapidly by vegetative means; at the Britannia site it was in young hardwoods more than 50 m from the nearest (long-abandoned) habitation site. Specimen: Britannia Conservation Area (DFB). Status: Rare escape, Ontario only.

Streptopus amplexifolius (Twistedstalk) Rare, Chelsea and Casselman

- an uncommon boreal calcicole, this species is rare and local in cedar swamps and limey seeps in hardwoods in southern Ontario; known previously in the Ottawa District only from two ancient collections (the Casselman station not clearly being in the District). Specimen: Lac La Pêche, Gatineau Park (CAN). Revised Status: Rare, Quebec only.

Trillium cernuum (Nodding Trillium) Sparse, Ontario only — a widespread calcicolous species of cool, wet woodlands across northern Ontario and rarely in rich maple swamp and fen-marginal woods in southern Ontario; known elsewhere in the District from two places along the Rideau River south of Ottawa, from a collection at Leamy Lake, Hull, and from extirpated stands in the city. Specimens: Cambrian Road Woods, Nepean (DAO, DFB). Revised Status: Rare Quebec, Sparse Ontario.

IRIDACEAE IRIS FAMILY

Sisyrinchium angustifolium (part of S. angustifolium of Gillett and White (1978)) (Narrow-leaved Blue-eyed Grass) Common - S. montanum is the name now applied to the species called S. angustifolium in Gillett and White (1978). True S. angustifolium is a more southern species that is considered to be rare in Ontario (Marchant and Greer 1975). It is probably a rare relict of prehistoric times in the Ottawa Valley (Brunton 1980 - erroneously listed as S. mucronatum). Specimens: Shirleys Bay, Kanata (CAN, DFB); Morris Island (DAO, MICH, DFB). Revised Status: Rare, Ontario only.

Sisyrinchium montanum Greene (part of S. angustifolium of Gillett and White (1978)) (Blue-eyed Grass)

New to List

The common element in "S. angustifolium" as it is considered in Gillett and White (1978); see S. angustifolium above.

Status: Common.

ORCHIDACEAE ORCHID FAMILY

Arethusa bulbosa forma albiflora Rand & Redf. (Dragon's-mouth) — an uncommon species of bogs and fens across eastern Canada (Luer 1975) and known in the District only from a long-extirpated stand at Mer Bleue, a colony at Manion Corners, and from three sites in the Gatineau Hills (Brunton 1984b). The white-flowered form albiflora is apparently very rare in Canada (Boivin 1966-1967). A small group of these was seen with typical plants at the Poltimore site. Specimen: Poltimore (DFB).

Corallorhiza maculata (Spotted Coralroot) Rare (in Ontario) - although known from a variety of sites across the Gatineau Hills in the District, it is recorded in Ottawa-Carleton only on the basis of three ancient records and two more recent but apparently extirpated sites (Bilberry Creek and Stony Swamp - Brunton 1983); a common species in acid soils under hardwoods on the Canadian Shield of central Ontario. Specimen: Green's Creek (DAO).

Malaxis monophyllos (White Adder's-mouth) Sparse - scattered throughout the District (especially in Ottawa-Carleton) in cedar swamps and calcareous springs (Brunton 1984b). Specimens: The Burnt Lands (DFB); Mer Bleue (CAN). Revised Status: Uncommon.

Platanthera clavellata (Club-spur Orchid) Sparse — a common species of sightly acidic, wet depressions in the Shield country of central Ontario, it is found in a few sites on the Quebec side but elsewhere in Ottawa-Carleton only at Stony Swamp (Brunton 1984b). Specimen: Mer Bleue (CAN). Revised Status: Sparse Quebec, Rare Ontario.

Platanthera flava (Tubercled Orchid) Sparse, chiefly along Ottawa River

- formerly considered to be rare in Canada (Argus and White 1977), it is now considered to be uncommon in Ontario and rare in Quebec (Argus and White 1982, Bouchard et al. 1983). It is confined to the Ottawa River shores in the District, where several old stations have been extirpated. It is most common at Shirleys Bay and Britannia. Specimens: Shirleys Bay, Nepean (CAN, DFB).

Revised Status: Rare Quebec, Sparse Ontario.

Platanthera grandiflora (Large Purple-fringed Orchid) Sparse - known from a number of sites in the Gatineau Hills and from several old records on the Ontario side (Reddoch 1976), this provincially-rare orchid is known in Ontario only from the Ottawa area (Catling et al. 1982). The only other recent record (a photographic record) in Ontario is from Cumberland Tp. (fide J. Reddoch). It is an Appalachian species at the western limit of its Canadian range here (Brunton 1984b). Specimen: Mer Bleue (DFB).

Revised Status: Sparse Quebec, Rare Ontario.

Spiranthes casei (Case's Ladies'-tresses) Sparse, Carleton Co. - a relatively newly-described species that is widespread across the southern edge of the Canadian Shield in Ontario (Catling and Cruise 1974) on slightly acidic, sandy/rocky ground; known from the Gatineau Hills and from a number of sizable stands in Stony Swamp (Brunton 1982). Specimens: Stony Swamp (CAN, DFB). Revised Status: Rare Quebec, Sparse Ontario.

Spiranthes <u>lucida</u> (Shining Ladies'-tresses) Sparse, Ontario only

- a southern species of wet, calcareous meadows and shores, it was considered to be rare in Canada but later study showed it to be widespread in southern Ontario (Argus and White 1982). Although formerly known from a few sites along the Ottawa River, it is now known elsewhere in the District only from the small population at Shirleys Bay (Brunton 1980). It is fairly common at the Morris Island sites. Specimens: Morris Island (DAO, DFB).

Revised Status: Rare, Ontario only (old records).

JUGLANDACEAE WALNUT FAMILY

Carya ovata (Shagbark Hickory) Rare, Aylmer and Casselman - Lafontaine and White (1974) document the stand they rediscovered at Deschênes; the removal of the cottages at this site has enhanced the situation considerably. A report from the Rockcliffe Airbase (Dickson and Darbyshire 1980) was based on an erroneous sight record (Brunton 1984a). The species is at the northern limit of its range here. Specimen: Deschênes (DFB).

BETULACEAE BIRCH FAMILY

Betula alba L. (European White Birch)

New to List

- a fairly commonly planted shade tree that persists from cultivation. Specimen: Carlingwood (DFB).

Status: Rare (persisting from cultivation).

Betula pendula Roth (Pendulous Birch)

New to List

- like <u>B. alba</u> (above), this species is commonly planted and persists well from cultivation and spreads slowly. Specimens: Green's Creek (CAN, DFB); Britannia Conservation Area (CAN, DFB). Status: Rare escape from cultivation, Ontario only.

ULMACEAE ELM FAMILY

Celtis occidentalis (Hackberry) Sparse

- a locally common tree at the northern limit of its range in the District (Brunton 1971); considered rare in Quebec (Bouchard et al. 1983). Specimens: Deschênes (CAN, DFB); Lower Duck Island (DFB); Green's Creek (DAO, DFB); University of Ottawa (DFB); Britannia Filtration Plant (DFB).

Revised Status: Sparse (along rivers), Rare inland.

Ulmus procera Salisb. (English Elm)

New to List

- a commonly planted ornamental and shade tree that persists (and spreads) from cultivation. Specimens: Blair Road, Gloucester (CAN, DFB).

Status: Rare escape from cultivation.

Ulmus pumila L. (Dwarf Elm)

New to List

- an introduced species that is spreading from cultivation and beginning to become "weedy" (showing up in sites far from cultivation); found in dry, disturbed ground. Specimens: Shirleys Bay, Nepean (CAN, DFB); Stony Swamp (CAN); Queensway at Maitland Ave. (DAO); Champlain Bridge, Aylmer (CAN); Green's Creek (DAO).

Status: Rare Quebec, Sparse Ontario.

Ulmus rubra (Slippery Elm) Sparse (in Quebec)

- a southern shrub approaching the northern limit of its range here; easily noted in winter by its tendency to retain some leaves and by the presence of galls on the twig tips; more overlooked than rare. Specimens: Farrelton (CAN, DFB); Deschênes (CAN); Harwood Plains (DFB).

Revised Status: Uncommon.

MORACEAE MULBERRY FAMILY

Morus rubra L. (Red Mulberry)
New to List

- a shrub/small tree that is typical of the Carolinian area of south-western Ontario but was known here only as a garden species. Shrubs planted at the Britannia Filtration Plant fruit abundantly (E. Frankton pers. comm.) and a variety of birds eat it. This undoubtedly accounts for the good-sized shrub that has

developed by the woods $\frac{1}{2}$ km to the west and for the small bushes along the path to the east (E. Dickson pers. comm.). Specimens: Britannia Conservation Area (DAO, DFB).

Status: Rare, Ontario only.

POLYGONACEAE BUCKWHEAT FAMILY

Polygonum cuspidatum (Japanese Knotweed) Sparse escape from cultivation

- an introduced ornamental that is becoming more common in the District, as suggested by Darbyshire (1982). Specimens: Eagleson Corners, Nepean (CAN, DFB); Stony Swamp (CAN, DFB); Britannia Heights (CAN); Mer Bleue (CAN); Deschênes (CAN). Revised Status: Uncommon.

Polygonum hydropiperoides (False Water-pepper) Sparse - a southern species approaching the northern limit of its range here in wet swales; mostly in the west end of Ottawa (Brunton 1982). Specimens: Stony Swamp (CAN, DFB).
Revised Status: Rare Ouebec, Sparse Ontario.

Rumex maritimus (Maritime Dock) Rare

- a prairie species in Canada that is a rare native and uncommon adventive in saline wet sites in Ontario; found in the District in sulphur springs and saturated clay deposits in Ottawa-Carleton (Brunton 1984b). Specimens: Borthwick Springs, Gloucester (CAN, DFB); Mer Bleue (CAN, DFB).

Revised Status: Sparse, Ontario only.

Rumex mexicanus (Willow-leaved Dock) Sparse
- a western species that is known from scattered sites along the
Ottawa River and as an adventive along railways in the District.
Specimen: Green's Creek (DFB).

AMARANTHACEAE AMARANTH FAMILY

Amaranthus powellii Wats. (Powell's Pigweed)
New to List

- a native of the western United States that has become an agricultural weed in southwestern Ontario (Weaver and McWilliams 1980). It was discovered in the west of Ottawa several years ago by C. Frankton, who also found this second site. Specimens: Whitehaven (CAN, DAO, DFB). Status: Rare, Ontario only.

AIZOACEAE CARPETWEED FAMILY

Mollugo verticillata (Carpetweed) Sparse, Ontario only
- a southern weed of open sandy sites that is restricted to a
few small sites in the District in both provinces (Brunton

1984b). Specimens: Mer Bleue (CAN, DFB).

Revised Status: Rare.

CARYOPHYLLACEAE PINK FAMILY

Arenaria lateriflora (Grove Sandwort) Sparse — a northern calcicole of wet shores that is found sparingly along the Ottawa River and rarely inland. Specimens: Shirleys Bay, Nepean (CAN, DFB); Green's Creek (CAN, DFB).

Arenaria serpyllifolia (Thyme-leaved Sandwort) Sparse - found regularly in the District in calcareous sands, on rock flats and disturbed sites where this introduction is locally abundant (Brunton 1984b). Specimens: Cascades (CAN); Mer Bleue (CAN); Church Hill, Gatineau Park (DAO).

Revised Status: Uncommon.

Cerastium nutans (Chickweed) Sparse
- a widespread, uncommon species of cool, acid woods that is
found primarily near the Ottawa River in the District. Specimens: Manotick (CAN, DFB); Harwood Plains (DAO, TRT, DFB).

Cerastium tomentosum L. (Snow-in-summer) New to List

- a rare escape from cultivation across southern Ontario and Quebec; also known from Bryson, just outside the District in Pontiac County. Specimens: Almonte (CAN, DFB). Status: Rare escape from cultivation.

Dianthus deltoides (Maiden Pink) Sparse
- a garden plant that is known as an escape from a few sites in
the District (Brunton 1982). Specimens: Britannia Conservation
Area (DAO, DFB).
Revised Status: Rare escape.

Sagina procumbens (Birdseye) Rare, Ottawa — a tiny, obscure native plant that is common in Atlantic Canada but which is rare as far west as Ontario (Argus and White 1977, Crow 1978). The only other Ottawa area record appears to be based on a specimen from Maxville, which is outside the 50 km District limit. The only certain record, then, appears to be of plants which grew up between recently-laid patio stones in our backyard! Specimen: Britannia (DFB).

Spergula arvensis (Spurry) Sparse
- an uncommon weed of acid sand in Ontario known from several
extirpated stations and, today, from only two other stations in
addition to those listed here. Specimens: Carlsbad Springs
(CAN, DFB); Mer Bleue (CAN).
Revised Status: Rare (old records).

Stellaria aquatica (Giant Chickweed) Sparse
- an uncommon weed of southern Ontario (more common in Quebec)
that is known in the District from several stations along the
Ottawa and Gatineau Rivers in wet, grassy areas. Known inland
only from the Mer Bleue area. Specimens: Mer Bleue (CAN, DFB);
Lower Duck Island (DFB).

Revised Status: Uncommon along Ottawa and Gatineau Rivers, Rare elsewhere.

NYMPHAEACEAE WATER-LILY FAMILY

Nuphar x rubrodiscum (Red-disk Pond-lily) Sparse
- a boreal aquatic hybrid between N. variegatum and N. microphyllum, this taxon is found sparingly along the Jock and Ottawa
Rivers and in Stillwater Creek (Brunton 1980, Dickson 1980).
Specimens: Shirleys Bay, Nepean (CAN, DFB).

RANUNCULACEAE CROWFOOT FAMILY

Ranunculus cymbalaria (Seaside Crowfoot) Rare — a salt-loving species of maritime mud-flats and prairie slough edges that is a very rare introduction into southern Ontario (Catling and McKay 1980). It was discovered in the late 1940s near Carlsbad Springs by W.G. Dore at an apparently now-extirpated station. The new sites are all at salt springs, suggesting a native (relict from the Champlain Sea) origin. Specimens: NE of Carlsbad Springs (DAO, MICH, TRT, DFB); Bourget (CAN, DAO, DFB); Cobbs Lake, Bourget (DAO, MICH, DFB). Revised Status: Rare, Ontario only.

FUMARIACEAE FUMITORY FAMILY

Adlumia fungosa (Alleghany-vine) Sparse
- an uncommon calcicole of rich hardwoods across Ontario (especially in the south), restricted to a few sites along the Ottawa and South Nation Rivers in the District, except for the following record. Specimens: Harwood Plains (DAO, TRT, DFB).

Revised Status: Rare (extirpated?) Quebec, Sparse Ontario.

Corydalis aurea (Golden Corydalis) Sparse
- a common boreal species of disturbed, gravelly, calcareous
ground that is scattered infrequently across the District (Brunton 1980). Specimens: Shirleys Bay, Kanata (CAN, DFB).

CAPPARIDACEAE CAPER FAMILY

Cleome spinosa L. (Spiderflower)
New to List (Species and family)

- a rare escape in southern Ontario (Scoggan 1978-1979), other-

wise known in the District from a 1943 collection of an escape at the Central Experimental Farm (Brunton 1983). Specimen: Green's Creek (CAN, DFB).

Status: Rare escape from cultivation, Ontario only.

CRUCIFERAE MUSTARD FAMILY

Armoracia aquatica (Lake Cress) Sparse

- an uncommon to rare species of rich rivershore swamps and
marshes that is approaching the northern limit of its range here
and is otherwise known in the District only from an extirpated
site along the Ottawa River and from the Jock River (Brunton
1980). Specimens: Shirleys Bay, Kanata (CAN, DAO, DFB).
Revised Status: Rare, Ontario only.

Brassica campestris (Field Mustard) Sparse, Ontario only — a widespread weed of disturbed ground and agricultural lands across Canada (Frankton and Mulligan 1970); found sparingly across the District in such sites, including at Val Tétreau (Brunton 1984b). Specimens: Mer Bleue (DFB); Britannia Conservation Area (DFB).

Revised Status: Rare Quebec, Sparse Ontario.

Camelina microcarpa (False Flax) Sparse

- a weed of agricultural areas and disturbed ground across
Canada, especially in the west (Frankton and Mulligan 1970);
known from scattered collectons across Ottawa-Carleton, in Hull
and at Beech Grove. Specimen: Britannia Conservation Area
(DFB).

Revised Status: Rare Quebec, Sparse Ontario.

Dentaria laciniata (Cut-leaved Toothwort) Sparse — a southern species of rich hardwoods that is at the northern limit of its range here; currently known in the District from the threatened Kanata Highlands, Stony Swamp, Farmers Rapids and this site. Specimens: Pakenham (CAN, DFB). Revised Status: Rare Quebec, Sparse Ontario.

Erucastrum gallicum (Dog Mustard) Sparse
- like B. campestris (above) although confined more to railroad sites. Specimen: Ramsayville (DFB).
Revised Status: Sparse, Ontario only.

Hesperis matronalis (Dame's Rocket) Sparse escape from cultivation, chiefly Ottawa

- found infrequently about old farm sites and habitations, from which it spreads rapidly (and readily). Specimens: Borthwick Springs, Gloucester (CAN); Britannia Conservation Area (DAO, DFB); Blackburn (DAO).

Revised status: Rare Quebec, Uncommon Ontario.

CRASSULACEAE ORPINE FAMILY

Sedum aizoon L. (Stonecrop)

New to List

- an uncommon garden escape in North America (Clausen 1975), apparently not reported from Ontario previously (Scoggan 1978-1979, Boivin 1966-1967); at least formerly grown in the Central Experimental Farm gardens (Clausen 1975). Specimen: Constance Lake (DFB).

Status: Rare escape from cultivation, Ontario only.

Sedum hispanicum L. (Spanish Stonecrop)

New to List

- a rare escape from cultivation in Canada that is known in the District from Kanata, along Corkstown Road and in Stony Swamp (Brunton 1982). The Wakefield station appears to be the only record for the Province of Quebec. Specimens: Stony Swamp (CAN, DFB); South March Highlands (CAN, DFB); Wakefield (DAO, DFB).

Status: Rare.

Sedum sexangulare. L. (Yellow Stonecrop)

New to List

- a rare escape from cultivation in North America that was grown (at least previously) at the Central Experimental Farm (Clausen 1975); it was reported by White (1979) from Shirleys Bay, apparently for the first time in Canada (Brunton 1980). Specimen: Shirleys Bay, Kanata (DFB).

Status: Rare, Ontario only.

Sedum telephium (Orpine) Sparse escape from cultivation found spreading from sites of former cultivation across Ottawa-Carleton. Specimens: Carlsbad Springs (CAN); Stony Swamp (CAN).

Revised Status: Uncommon escape from cultivation, Ontario only.

SAXIFRAGACEAE SAXIFRAGE FAMILY

Philadelphus coronarius L. (Mock Orange)

New to List

- an uncommon escape across southern Ontario that is known from the Mer Bleue and Parliament Hill areas (Brunton 1984b). Specimens: Mer Bleue (CAN, DFB); Val Tétreau (DAO, DFB). Status: Rare escape.

Ribes triste (Wild Currant) Sparse

- a widespread shrub of cool, wet woodlands across Ontario in circumneutral, organic/sandy ground; known elsewhere in the District from several old records and from the Vincent Massey Park, Constance Lake, Stittsville, Britannia and Gatineau Park areas. Specimens: Manotick (CAN, DFB); Cambrian Rd Wood, Ne-

pean (DFB).

Revised Status: Sparse Quebec, Uncommon Ontario.

HAMAMELIDACEAE WITCH HAZEL FAMILY

Hamamelis virginiana (Witch Hazel) Rare, old records — a characteristic shrub of the hardwood forests of the southern Great Lakes that is rare in the District at the northern limit of its Ontario range (Soper and Heimburger 1982); while known only in one area in Ottawa-Carleton (Darbyshire and Dickson 1980), it is found in a number of sites along the Eardley Escarpment on the Quebec side (Gagnon 1980, Brunton 1983) where it is considered to be provincially rare (Bouchard et al. 1982). Specimens: Green's Creek (CAN, DFB).

Revised Status: Sparse Quebec, Rare Ontario.

ROSACEAE ROSE FAMILY

Geum laciniatum (Slashed Avens) Rare, old record Hull astern and southern species of wet, scrubby woods that is rare in Ontario (Argus and White 1977). Known in the District from a 1908 (extirpated) Hull station and also from Rockcliffe Air Base and Britannia, in addition to the sites listed here. Specimens: Borthwick Springs, Gloucester (CAN); Mer Bleue (CAN, DAO, DFB); Green's Creek (DAO, DFB).

Revised Status: Sparse, Ontario only (old records).

Geum urbanum L. (Town Avens)

New to List

- an uncommon introduction across Ontario that was discovered in disturbed ground in west-end Ottawa at the site listed below by C. Frankton and where it continues to do well. Specimen: Whitehaven (DFB).

Status: Rare, Ontario only.

Potentilla simplex (Common Cinquefoil) Sparse
- scattered regularly across the District in open, sandy, dry,
disturbed sites where it is approaching the northern limit of
its range (Brunton 1984b). Specimens: Green's Creek (CAN, DFB);
Mer Bleue (CAN, DFB); Hazeldean (DAO); Church Hill, Gatineau
Park (DAO).

Revised Status: Uncommon.

Rosa cinnamomea (Cinnamon Rose) Sparse escape from cultivation - an infrequent escape at old habitation sites across southern Ontario and across the District (Brunton 1984b). Specimen: Mer Bleue (DFB).

Rosa rugosa Thunb. (Rough Rose)

New to List

- an infrequent introduction and garden escape across eastern Canada (Scoggan 1978-1979) that is found in only one site in the District. Specimen: Carlsbad Springs (CAN, DFB).

Status: Rare escape, Ontario only.

Sorbus americana (American Mountain-ash) Sparse - common on dry, sandy/rocky sites in acid soils of the Canadian Shield of Ontario and found fairly frequently across the Gatineau Hills in the Ottawa District (Brunton 1984b); in Ottawa-Carleton it is known also from a number of sites across the Greenbelt (Brunton 1984b, Dickson and Darbyshire 1980). Specimen: Mer Bleue (DFB).

Revised Status: Uncommon.

Sorbus aucuparia (European Mountain-ash) Rare escape from cultivation

- a fairly common escape across southern Ontario (apparently prefering calcareous ground) and known from at least six sites across the Ottawa District (Brunton 1984b). Specimen: Mer Bleue (CAN).

Revised Status: Sparse escape from cultivation.

Spiraea vanhouttei (Briot) Zab. (Bridal-veil) New to List

- a planted shrub, it is apparently unreported as an escape in Canada (Boivin 1966-1967, Scoggan 1978-1979). It was found beyond any sign of cultivation, growing along a trail through young hardwoods. Specimens: Stony Swamp (DAO, DFB). Status: Rare escape, Ontario only.

LEGUMINOSAE BEAN FAMILY

Astragalus canadensis (Canadian Milk-vetch) Sparse – a widespread prairie species that is local in Ontario on limestone plains and alvars (Catling et al. 1975), it is found infrequently in the District (almost exclusively on the Ontario side) in similar sites. Specimens: Britannia Conservation Area (CAN, DFB).

Revised Status: Rare Quebec, Sparse Ontario.

<u>Caragana</u> <u>arborescens</u> Lam. (Siberian Pea-tree) New to List

- a commonly planted species of prairie windbreaks and "old-fashioned" hedges, this shrub is spreading by seed and root suckers at the District sites (and from presently cultivated hedges). Specimens: Harwood Plains (DAO, DFB); Borthwick Springs, Gloucester (DAO, DFB).

Status: Rare escape, Ontario only.

Coronilla varia (Crown-vetch) Sparse escape from cultivation - considered an occasional introduction that does not persist in Ontario by Montgomery (1957), but it seems to have lasted in some open, weedy areas in the District and beyond, and is becoming increasingly common. Specimens: Britannia Conservation Area (CAN, DFB); Rockcliffe Air Base (CAN); Hazeldean (DAO); Bourget (DFB).

Desmodium glutinosum (Glutinous Tick-trefoil) Sparse (in Ontario)

Uncommon.

Revised Status:

- a southern species of rich hardwoods (in circumneutral soils?) that is fairly common on the Quebec side but known in Ottawa-Carleton primarily from old specimens (Brunton 1983), except in the Green's Creek area. Specimens: Green's Creek (CAN, DFB); Navan (CAN); Harwood Plains (DAO).

Gleditsia tricanthos (Honey-locust) Rare escape from cultivation, chiefly Ottawa

- a rare native tree of extreme southern Ontario that is an uncommonly escaped cultivar across southern Ontario and that is rare in the Ottawa District (Brunton 1984b). Specimens: Mer Bleue (DFB); Dominion Springs, Pakenham (DAO, DFB).

<u>Lathyrus</u> <u>ochroleucus</u> (Pale Vetchling) Sparse along the Ottawa River

- a common prairie species that is uncommon along Great Lakes shores and former drainage channels in southern Ontario; found along the Ottawa River in the District and (rarely) as a weedy species along railways. Specimens: Shirleys Bay, Kanata (CAN, DFB).

Lathyrus sylvestris (Everlasting-pea) Rare (in Ontario)

- a recently established weed in Ontario that is locally abundant in areas of the Gatineau Hills in the District (Brunton 1983). In Ottawa-Carleton it is otherwise known only from an old (1948) collection at the Experimental Farm. Specimens: The Glebe, Ottawa (CAN, DFB); Blackburn (CAN, DFB); Blackburn Hamlet (DAO).

<u>Lupinus polyphyllus</u> (Large-leaved Lupine) Rare escape from cultivation

a regular component of old gardens, it has spread widely and become abundant between Wakefield and the village of Larrimac, and is also known from Stony Swamp and formerly the Experimental Farm (Brunton 1982). Specimens: Wakefield (DAO, DFB).
 Revised Status: Abundant in lower Gatineau Valley, Rare elsewhere.

Phaseolus coccineus L. (Scarlet Runner-bean)

New to List

- commonly grown in vegetable gardens in the province but rarely persisting in the wild; it was found here along roadside parking lot beyond the sight of any gardens. Specimen: Carlington (DFB).

Status: Rare escape, Ontario only.

Trifolium arvense (Rabbitfoot Clover) Sparse about Ottawa - an occasional weed in southern Ontario (Montgomery 1957) that is known primarily from older specimens and that is very common in the more eastern areas of Canada; locally distributed across the District (in calcareous soils?). Specimens: Uplands (CAN, DFB).

Revised Status: Rare, Ontario only (old records).

Vicia tetrasperma (Four-seeded Vetch) Sparse
- a widespread but local and uncommon weed across southern
Ontario and Quebec that does not spread quickly; found in dry,
sandy, (calcareous?) soils in disturbed ground across the District. Specimens: Green's Creek (CAN, DFB); Blackburn Hamlet
(DAO, TRT, DFB).

Literature Cited

- Argus, G.W. and D.J. White. 1977. The rare vascular plants of Ontario. Syllogeus 14, National Museum of Natural Sciences, Ottawa.
- Argus, G.W. and D.J. White, editors. 1982. Atlas of the rare vascular plants of Ontario Part 1. National Museum of Natural Sciences, Ottawa.
- Boivin, B. 1966-1967. Enumération des plantes du Canada. Provancheria 6, Université Laval, Québec.
- Bouchard, A., D. Barabé, M. Dumais and S. Hay. 1983. The rare vascular plants of Quebec. Syllogeus 48, National Museum of Natural Sciences, Ottawa.
- Brunton, D.F. 1971. A report on the status of Hackberry (Celtis occidentalis L.) in the Ottawa District. Trail & Landscape 5(3): 68-75.
- Brunton, D.F. 1980. Shirleys Bay life sciences. Conservation Studies I, Greenbelt Division, National Capital Commission, Ottawa.
- Brunton, D.F. 1982. An ecological inventory of the Stony Swamp Conservation Area, National Capital Commission Greenbelt, Nepean, Ontario. Conservation Studies 5, National Capital Commission, Ottawa.

- Brunton, D.F. 1983. An ecological inventory of the Green's Creek Sector, National Capital Commission Greenbelt, Gloucester, Ontario. Conservation Studies 17, National Capital Commission, Ottawa.
- Brunton, D.F. 1984a. Nature reserve potential and management in the National Capital Region, on National Capital Commission lands, Ontario/Quebec. Conservation Studies 29, National Capital Commission, Ottawa.
- Brunton, D.F. 1984b. The vegetation and flora of the Mer Bleue Conservation Area, National Capital Commission Greenbelt, Ottawa-Carleton, Ontario. Conservation Studies 22, National Capital Commission, Ottawa.
- Brunton, D.F. 1985. Recent significant plant records from the Ottawa District. Part I. Clubmoss Family to Sedge Family. Trail & Landscape 19(1): 27-47.
- Brunton, D.F. and P.M. Catling. 1982. The Slender Sedge/new to the Ottawa District. Trail & Landscape 16(3): 152-157.
- Catling, P.M. and J.E. Cruise. 1974. Spiranthes casei, a new species from northeastern North America. Rhodora 76: 526-536.
- Catling, P.M., J.E. Cruise, K.L. McIntosh and S.M. McKay. 1975. Alvar vegetation in southern Ontario. Ontario Field Biologist 29: 1-25.
- Catling, P.M. and S.M. McKay. 1980. Halophytic plants in southern Ontario. Canadian Field-Naturalist 94: 248-258.
- Catling, P.M., R.E. Whiting, D.J. White, J.M. Reddoch and A.H. Reddoch. 1982. *Platanthera grandiflora* (Bigel.) Lindl. *in* Argus, G.W. and D.J. White, editors. Atlas of rare vascular plants of Ontario Part 1. National Museum of Natural Sciences, Ottawa.
- Clausen, R.T. 1975. Sedum of North America north of the Mexican Plateau. Cornell University Press, Ithaca.
- Crow, G.E. 1978. A taxonomic revision of Sagina (Caryophyllaceae) in North America. Rhodora 80: 1-91.
- Darbyshire, S. 1982. Some additions and annotations to the Checklist of vascular plants of the Ottawa-Hull region, Canada. Trail & Landscape 16(4): 214-220.
- Darbyshire, S. and H.L. Dickson. 1980. Witch-hazel in the Ottawa area. Trail & Landscape 14(5): 158-160.
- Dickson, H. L. 1980. Stillwater Creek. Trail & Landscape

- 14(4): 130-134.
- Dickson, H.L. and S. Darbyshire. 1980. Biological inventory of 23 areas in the Ottawa region. National Capital Commission, Ottawa. 2 vol.
- Frankton, C. and G.A. Mulligan. 1970. Weeds of Canada. Canada Department of Agriculture, Ottawa.
- Gagnon, D. 1980. Inventaire des ressources naturelles des boisés de la région de Hull. National Capital Commission, Ottawa.
- Gillett, J.M. and D.J. White. 1978. Checklist of vascular plants of the Ottawa-Hull region, Canada. National Museum of Natural Sciences, Ottawa.
- Lafontaine, J.D. and D.J. White. 1974. Shagbark Hickory in the vicinity of Deschenes, Quebec. Trail & Landscape 8(4): 110-111.
- Luer, C.A. 1975. The native orchids of the United States and Canada excluding Florida. New York Botanical Garden, N.Y.
- Marchant, D.A. and J.W. Greer. 1975. Preliminary studies of Sisyrinchium (Iridaceae) in Ontario. Ontario Field Biologist 36: 36-43.
- Montgomery, F.H. 1957. The introduced plants of Ontario growing outside of cultivation Part II. Transactions of the Royal Canadian Institute 32: 3-34.
- Reddoch, J. 1976. Large Purple Fringed-orchid: a new-old species. Trail & Landscape 10(5): 130-135.
- Scoggan, H.G. 1978-1979. The flora of Canada. Publications in Botany Number 7 (1-4), National Museum of Natural Sciences, Ottawa. 4 vol.
- Soper, J.H. and M.L. Heimberger. 1982. Shrubs of Ontario. Royal Ontario Museum, Toronto.
- Stuckey, R.L. 1981. Distributional history of *Juncus compressus* (Juncaceae) in North America. Canadian Field-Naturalist 95: 167-171.
- Weaver, S.E. and E.L. Williams. 1980. The biology of Canadian weeds. 44. Amaranthus retroflexus L., A. powellii Wats. and A. hybridus L. Canadian Journal of Plant Science 60: 1215-1234.
- White, D.J. 1979. The flora of Innis Point. Trail & Landscape 13(5): 174-177. ¤

Early Winter Birding Field Trip

Bruce M. Di Labio

On December 9, 1984, The Ottawa Field-Naturalists' Club held a half-day birding excursion aboard the National Museum of Natural Sciences' Dinobus. Thirty-one people met at the Museum, and by 8:30 a.m. the bus was on its way.

The first stop was behind the airport along Leitrim Road and Armstrong Road. This area is usually quite good for observing raptors (hawks and owls), but that day it was fogged in, making it impossible to see anything. The day before I had seen a Snowy Owl on Armstrong Road, but because of the foggy conditions we were unable to locate it.

Our next stop was at Manotick to check out the ducks. Upon arriving, we could see hundreds of Mallards and Blacks swimming in the channel. We also picked out a late Northern Pintail from the hoards, and spotted an American Robin sitting in a tree near the bridge.

We drove on towards Richmond in search of Snowy Owls, but again we were stumped. This is the last time I am going to guarantee a bird! We did locate a Rough-legged Hawk, perched in a tree. With very little activity in the open fields, I decided



The Dinobus and its passengers in the Richmond area photograph from a slide by Richard Brouillet

to try the Jack Pine Trail on Moodie Drive. Maybe our luck would change.

There was some activity around the feeders, which have been operated by The Ottawa Field-Naturalists' Club for many years. This area is almost always productive for winter birding. While Black-capped Chickadees and a White-breasted Nuthatch were eating sunflower seeds, both a Hairy Woodpecker and a Downy Woodpecker were feeding at the suet, giving us a good comparison of the sizes of the two woodpeckers. A few Purple Finches and American Goldfinches could be heard overhead.

With time running out, we made a quick check once more for Snowy Owls, this time over in the Greenbank Road area. Again, no luck.

Since the weather was clearing, we made our last stop behind the airport where we had started. Finally, on Armstrong Road, we found the elusive Snowy Owl, to the delight of all. $\mbox{\tt m}$

Point Pelee Excursion

DATE: May 17 - 20 (inclusive), 1985 LEADERS: Bruce Di Labio and others

Your Club, through Travelways, is offering an excursion to Point Pelee on the Victoria Day long weekend to observe birds and whatever else might be of interest. We may also visit Rondeau Park on the way back to Ottawa.

Point Pelee, a tiny peninsula of marsh, beach and forest, is a birding hot-spot and one of the most important migratory areas in North America. In fact, it is one of the premier birding locations in the world. Probably no other place in North America attracts more naturalists than Point Pelee National Park in the spring. More than 300 species of birds have been recorded in the Park, with an impressive total of 250 or more species recorded every spring. During the peak of the springtime migration, it is not uncommon to see over 100 species in a single day. The last year's trip was very successful. (See Trail & Landscape 18(2): 93-95 (1984).)

ACCOMMODATION will be in the Holiday Inn in Windsor, west of the Park. Prices are as follows:

single occupancy (I	single bed)	\$300.	per person
twin occupancy (2	single beds)	\$200.	per person
triple occupancy (2	double beds)	\$170.	per person
quadruple occupancy (2	double beds)	\$159.	per person
NOTE THAT THESE PRICES	INCLUDE BUS FA	RE BUT	NOT MEALS.

MEALS will be provided at the Inn with breakfast tentatively scheduled for 5:00 - 5:30 a.m. and dinner for 6:30 p.m. Box lunches will be provided on Saturday, Sunday and Monday for \$5. each plus tax. Meals will be paid for individually; they are not included in the above-quoted costs. You should bring a lunch with you on Friday.

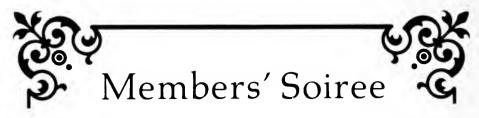
TENTATIVE ITINERARY

Friday, May 17: leave Ottawa 6:00 a.m., arrive Windsor 4 p.m.

Saturday and Sunday: breakfast 5:00 - 5:30 a.m.
depart for Pelee 5:45 a.m.
depart from Pelee 5 - 6 p.m.
dinner 6:30 p.m.; evening free

Monday, May 20: breakfast 6:00 - 6:30 a.m.; depart 7:00 a.m.; two- or three-hour stopover at Rondeau Park; arrive Ottawa 8 p.m.

- 1. Reservations should be made as soon as possible by calling the Club number (722-3050). Payment in full must be received by March 21. For full refund, notice of cancellation must be made before April 15. Send your payment for this trip (by cheque or money order payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honeywell Avenue, Ottawa K2A OP7. Do not delay in making your reservation. If the bus is not filled by our members, it will be opened to the general public after March 21. If we do not get a good early response, the trip will be cancelled. (It must be cancelled before April 15 in order to recover our down payment.)
- Expect to see more people than birds at the Park at this time of the year. Pedestrian traffic is expected to be heavy.
- Binoculars and warm clothing are essential. Rain gear should be taken, but we hope will not be needed.
- The bus will be at our disposal; it will stop or go according to our requests.
- 5. If you get the answering service when you call the Club number, please leave your name and phone number, and we will contact you. ¤

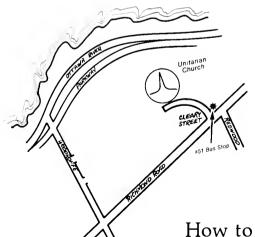


Help make this another special evening by contributing your slides, photographs and art. Those members wishing to do so please contact either Peter Hall (733-0698) or Colin Gaskell (728-7217) for confirmation or clarification before April 5th.

Prints and artwork must be mounted for easy handling. All items for display should be brought to the Unitarian Church between 4 and 6 p.m. on April 19th and taken home at the end of the evening.

This year, the best overall colour or black and white photographic print will be selected by ballots cast by all Club members in attendance. The lucky winner will take home an art print by local artist Barry Flahey titled *The Marmot*.

Prizes will also be awarded for the best Macoun Club displays in each of the three age classes: Junior (grades 4 to 6), Intermediate (grades 7 and 8), and Senior (grades 9 to 13). Children who are OFNC members but not Macoun members are invited to compete in the appropriate age group as well. First prize is the book Glen Loates: A Brush with Life, a showcase of the artist's wildlife paintings. Second prize is a butterfly net, and third prize is a compass.



See the centrefold for complete information on the Pot-luck Supper. ¤

How to Get to the Soirée

Coming Events

arranged by the Excursions and Lectures Committee Philip Martin (729-3218), Chairman

Times stated for excursions are departure times. Please arrive earlier; leaders start promptly. If you need a ride, don't hesitate to ask the leader. Restricted trips will be open to non-members only after the indicated deadlines.

Date and

AMPHIBIANS IN SPRING

time to be

Leader: Stephen Darbyshire (749-9317)

decided

Meet: to be decided

The success of this outing is very dependent on the weather. If you wish to participate, telephone the Club number (722-3050) before March 10. When a date and a meeting place for the outing have been fixed, you will be notified by telephone. To accommodate more people, Stephen may run the excursion twice. Bring a strong flashlight and a long-handled dip net; wear rubber boots and warm clothes.

Tuesday 12 March 8:00 p.m. OFNC MONTHLY MEETING

WHAT MAKES THE CONSERVATION COMMITTEE TICK

Speaker: Roger Taylor

Meet: Auditorium, National Museum of Natural
Sciences, Metcalfe and McLeod Streets
Over the years The OFNC Conservation Committee has
been involved in many local issues, such as the
future of the Carp Hills and Alfred Bog. The speaker will take you on a visual tour of some important
areas, show why they "turn us on", and bring you up
to date on their current status. And, as an added
bonus, Roger will let you in on a carefully guarded

secret: what makes the Conservation Committee tick!

Wednesday

NIGHT OWLING

20 March 8:00 p.m. Leader: Bruce Di Labio (729-6267)

Meet: Neatby Building, Central Experimental Farm,

one block west of the Irving Drive - Maple Drive stoplight on Carling Avenue. Use the parking lot west of the Neatby Building and

south of the greenhouses.

Take advantage of this field workshop to learn the diagnostic "hoots" of the owls and the "songs" of some other nocturnal birds. Participants will probably hear Great Horned, Barred, Saw-whet and, with a little luck, Long-eared Owls. Telephone Bruce if you plan to go. He will then be able to contact you if the trip is postponed because of unfavourable weather. If all goes well, the trip will last until midnight or perhaps 1 a.m.; if the weather and/or birds are uncooperative, it will finish early.

Sunday 31 March 6:30 a.m. BUS EXCURSION: BIRDING AT PRESQU'ILE

Leaders: Bruce Di Labio and Bernie Ladouceur Meet: Loblaws, Carlingwood Shopping Centre, Carling Avenue at Woodroffe Avenue

Cost: \$19.00 per person (prepaid at least ten days in advance)

This spring tradition is one of our most popular outings. The highlight of the trip will be the large flocks of waterfowl gathered at the provincial park awaiting favourable conditions before continuing their migration further north. Bring enough food for this all-day excursion. Dress warmly and wear waterproof footwear. Bring binoculars or, even better, a telescope. Reserve a spot by sending a cheque or money order (payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honeywell Avenue, Ottawa K2A OP7, at least ten days in advance. Include your name, address, telephone number and the name of the outing.

Tuesday 9 April 8:00 p.m. OFNC MONTHLY MEETING AN ARTIST IN THE ARCTIC

Speaker: Brenda Carter

Meet: Auditorium, National Museum of Natural Sciences, Metcalfe and McLeod Streets
Brenda is a well-known wilderness artist who strives to bring out the relationships between man, wildlife and the land in her work. She was featured in the October/November 1984 issue of Canadian Geographic, and her work has appeared in the National Geographic (May 1981). She has spent many summers tagging polar bears, and has worked with the Inuit of Igloolik, who still follow the traditional way of life to a large extent. Drawing on these and other experiences, her slide presentation will describe a unique and personal view of the problems faced by the artist in the Arctic. Brenda will bring along some original paintings and sketches, and Arctic clothes.

Saturday 13 April 3:30 a.m.

EARLY MORNING OWLING

Leader: Bruce Di Labio (729-6267)

SPRING WILDFLOWER FIELD TRIP

eet: Neatby Building, Central Experimental Farm, one block west of the Irving Place - Maple Drive stoplight on Carling Avenue. Use the parking lot west of the Neatby building and south of the greenhouses.

If the outing goes according to plan, participants will learn to identify several owls and other nocturnal birds by their characteristic sounds, enjoy the dawn chorus, and see such birds as woodcock and snipe. Telephone Bruce if you are interested in participating. If for some reason the trip is postponed, he will be able to notify you. The outing is expected to last until about 9 o'clock.

Friday 19 April OFNC SOIREE - POT-LUCK SUPPER
Meet: Unitarian Church Hall, 30 Cleary Street
See the centrefold, inside back cover, and page 116
for additional details.

Saturday 27 April 9:00 a.m.

Leaders: Frank Bell and Ellaine Dickson

Meet: National Museum of Natural Sciences, front
entrance, Metcalfe and McLeod Streets

This year the trip is being run a few weeks earlier
to enable participants to see some early-blooming
species missed on previous outings. The half-day
outing will explore a local area. Bring insect
repellent and waterproof footwear.

Sunday 28 April 6:30 a.m. BUS EXCURSION: HAWK MIGRATION AT DERBY HILL, N.Y. Leaders: Steve O'Donnell and Bob Bracken Meet: Loblaws, Carlingwood Shopping Centre Carling Avenue at Woodroffe Avenue

Cost: \$19.00 per person (prepaid at least ten days in advance)

When weather conditions and timing are favourable, as they were for last year's trip (see Trail & Landscape 18(4): 216-217 (1984)), the spectacle of thousands of hawks migrating through Derby Hill is well worth the long bus ride. Bring enough food for this all-day outing. Dress warmly and wear waterproof footwear. Binoculars are essential. Canadians should bring proof of citizenship, and non-Canadians should carry passports. Binoculars, cameras and other equipment in "new" condition should be registered with Canada

Customs (Port of Ottawa, 360 Coventry Road, or Port of Hull, Place du Portage Phase II COMM Level I) in advance of the trip. Make your reservation by mailing your cheque or money order (payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honeywell Avenue, Ottawa K2A OP7, at least ten days in advance. Include your name, address, telephone number, and the name of the trip. If the weather forecast on the day before the excursion is particularly unfavourable, the trip will be cancelled. If the weather forecast for the eastern end of Lake Ontario (telephone 998-3440) is poor and you cannot be reached by phone on the 27th, please telephone Rick Leavens (835-3336) to confirm the trip's status. Be sure to turn your clock forward one hour on Saturday night!

Wednesday l May EVENING STROLL IN THE SOUTH MARCH HIGHLANDS

Leader: to be decided

6:30 p.m. Meet: Lincoln Fields Shopping Centre, northeast corner by garden centre, Richmond and Assaly

This is the first of four informal evening walks offered each May to expand members' general knowledge of natural history. Insect repellent may be useful; wear waterproof footwear.

Saturday 4 May 7:30 a.m. BIRD WALK FOR BEGINNERS Leader: to be decided

Meet: Britannia Woods (entrance to the Britannia Filtration Plant; Bus #51 stops here)
This is the first of a series of four Saturday morning walks for novice birders to be offered in May. Binoculars are essential, and insect repellent and waterproof footwear are advisable.

Field Trip to Alberta's Dinosaur Badlands

July 2 to 9 inclusive, 1985; Leader: Janette Dean

This trip will be a splendid opportunity to see dinosaur remains both *in situ* and in the newly opened Tyrell Museum. Other highlights of this trip to a fascinating region of Canada will be interesting geological structures (for example, hoodoos), birds and plants of the western badlands. Participants

are also likely to see Promyhoto mid-lype or muth to how over. World Park.

The total cost properson of 1.170 to books on species. A deposit of 80 is required at the relative kind with the ball ance due by May 1st. These processing Code of constant, 2 to strunches, 7 support, crystochers, trees, and other a factor with cP are accommodation to be a constant to the constant c

That the form $w \in \mathbb{N}$ is set to be $t \in \mathbb{N}$. The form $t \in \mathbb{N}$ is the first form $t \in \mathbb{N}$ and $t \in \mathbb{N}$ and $t \in \mathbb{N}$ is the form $t \in \mathbb{N}$.



Ottawa Banding Group Raffle

The sufficient of the growing state of the sufficient of the suffi

trant Province in the Community of the C

are ad, the ed out the next the are

For $0 \le k \le 2$, $0 \le k \le 2$, $0 \le k \le 2$

to a set of a constant of the set of the set

 $\mathbf{p}^{*} \leftarrow \mathbf{p} \cdot \mathbf{p$

^{- - -}

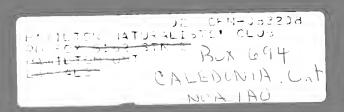
TRAIL & LANDSCAPE

published by

THE OPTAWA FIELD NATURALISTS' CLUB

Second Class Mail - Registration Number 2777 Postage paid in eash at Ottawa

Change of Address Notices and undeliverable Copies;
Box 3°64 Postal Station C, Ottawa, Ont.
KIY 4J5
Return postage guaranteed



Printed by LOMOR PRINTERS LTD